TEACHERS COLLEGE RECORD

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LITERATURE

GRADE VII

The time devoted to reading, language, and nature-study in the lower grades must be divided in the seventh grade among the various branches of English composition, spelling, literature, formal grammar, and French or German. There is, therefore, only a minimum of time left for literature. For this reason we aim to make the reading hour a welcome breathing space in the rather strenuous daily program of our seventh grade boys and girls. Forgetting for a brief period the sterner actualities of school life, the striving after accuracy in mathematics or logical precision in grammar, we become absorbed in ideals of thought and action and in the beauty of form in which they are presented, interested and amused by literature now of a lighter, now of a more meditative vein.

Other studies make pressing demands in the way of outside preparation so that a large part of the year's work in literature is done in the classroom. Sometimes a short poem or prose selection to be committed to memory is assigned for homework after it has been read and discussed in class, more often, however, the work to be done at home is of a more recreative character as suggested by the following questions and directions:

Read ahead to page —— and be able to tell the story. Choose from *The Speaker and Reader* under "Enterprise and Courage" a selection to read to the class. Choose one under "Patriotism" you would like the class to learn. Look over the poems in

Golden Numbers under the heading "In Merry Mood" and decide which is the merriest. Which of the poems on "April" do you prefer? Which of the selections under "Life Lessons" might be helpful for you to know by heart?

We cannot readily measure the results of such hours as these by means of rigid tests and percentages of class standing; on the contrary, the results of our efforts to train the mind and the emotions through the appreciation of ideals and to improve standards of literary taste are more intangible and are to be spelled rather in terms of conduct. Because there is less formal instruction in literature than in any other subject on our program there is less need for conscious tests. Every lesson, however, is a testing of the pupil's ability to appreciate and enjoy. If, after committing to memory Lincoln's "Gettysburg Speech," we turn to Patrick Henry's "Address before the Virginia Delegates," learned some weeks before, and put the question "Which of these two speeches is the finer or better worth remembering?" we are consciously trying to discover what power the pupil has of recognizing great thoughts and noble language; but the pupil, being unaware that he is on trial, so to speak, has a very different attitude from that before a formal test in a more formal subject.

In planning what our boys and girls shall read during the year we not only take into consideration their varied interests and tastes, but we also realize that it is the teacher's privilege to awaken new interests and to direct half formed tastes into channels that may lead to permanent sources of enjoyment. Stories and poems of the heroic type we must have, and as many of them as we can. The noble deed, the act of unselfishness make the heart glow and fill the boy with the desire to be better than he is. Some of the poems of this character, such as "Incident of the French Camp," "The Pipes at Lucknow," "The Dove of Dacca," and "Hohenliden" are so short and simple in motive and action that one lesson is sufficient for the reading and discussion. But when we come to "Hervé Riel," "The Lady of Shalott," "The High Tide on the Coast of Lincolnshire," and "The Revenge" it is worth while to spend two or three lessons in outlining the story, describing the setting, discussing the characters and their motives, making some application which will bear on our conduct to-day, and in calling attention to the

skill of the poet in choosing the measure of his verse, his imagery, and the like.

As an illustration of one method of studying a longer poem the following questions are given. The poem is first read aloud by the teacher, and the class questioned to see that all have the main points of the story clearly in mind.

HERVÉ RIEL

1. Tell the story in outline.
2. What historical foundation has the poem?
3. Who was the "victor in full chase?" What line first tells you this?
4. Where is the scene of the poem laid? What were the difficulties that beset the pilots?
5. What fate did the French prefer? *Cf.* with Sir Richard Grenville's order to the gunner of the Revenge.
6. When does the hero appear? How does he enter upon the scene? Who was he, and how came he on the ship?
7. What reasons does he give for the inability of the pilots to get the ships into the harbor? How does he convince the commander of his ability? How had his life prepared him for this task? What risk did he take? How did he succeed?
8. What advance in position had Hervé Riel made in one day? Why did Damfreville find it hard to thank him? Cite passage. What could France have done for him?
9. Did Hervé Riel get less than he deserved? *Cf.* with Grenville and Admiral Dewey. Do you think there are many unknown heroes like Hervé Riel?
10. In what ways can a nation reward its defenders?
11. Why was this poem written? Find some other poem in your book written for a similar purpose.
12. Be prepared to explain the following: Starboard, port, offing, disembogues, Louvre.

Through this study the character of the simple Breton fisherman becomes a vivid reality to our boys and girls, and his courage and modesty are referred to again and again as a sort of standard by which the actions of other men that history or literature reveals to them are measured.

The questions above suggest the main points to which the

teacher wishes to direct the thought of the class, but some of them will, of course, be dwelt on at greater length than others. This year, as a result of the interest aroused by a discussion of question 10 in the above list, the children prepared an exhibit to show "How America has honored her Heroes." A committee of a boy and a girl from each section of the seventh grade was appointed to assume the responsibility for getting up the exhibit, but the co-operation of all the pupils in the grade was enlisted. One boy who is skillful in lettering was asked to make the label so that the younger children would know what it was all about; others mounted pictures, maps, and stamps, and inside of a week they had collected a brave showing of books, poems, speeches, pictures, stamps, busts, medals, etc., which were placed in one of the halls easy of access to the whole school.

The changing year brings the nature poems in close touch with our lives. Some of these like Bliss Carman's "A Vagabond Song," and Aldrich's "Maple Leaves," or Charles of Orlean's "Spring," are learned by heart; others, like portions of "Snow-Bound," "To a Mountain Daisy," Lowell's "June," from "The Vision of Sir Launfal," are read as occasion prompts. What we aim to leave uppermost in the child's mind after talking over one of these poems is that the poet sees more deeply and truly into the heart of things than other writers, and that what he thinks or sees or feels must be expressed, if he is a true poet, in a beautiful form. Even if the boy does not care particularly for the poem he can be taught to see wherein the beauty lies and why it has lived so long in the heart of the world.

Some of our memory selections are demanded by our interest in history. "The Concord Hymn," "Warren's Address," and "Old Ironsides," as well as short extracts from the speeches of noted Americans form part of the equipment of every class that leaves the elementary school, and while the learning of such selections may be more or less of a bugbear to many boys and girls, after the task is once done the recitation in concert is a source of pleasure.

Early in the year we read Charles Dudley Warner's "A-hunting of the Deer and other Essays." The children are attracted by the author's genuine love of nature, his playful spirit, kindly satire, and the informality of his style. "How I Killed a

Bear" always amuses a class, and the "Deer" story has influenced more than one budding sportsman to lay aside his gun for a less dangerous weapon. These essays have enough of the story element to hold the interest, so that as a rule there is a loud protest if the book is laid aside before all the stories have been read. As this is not possible to do in school, those most interested read at home and mark certain pages to be read by the class.

One happy result of the reading of these essays by Mr. Warner, as well as those by John Burroughs, which we take up in the spring, is the impetus they give to the composition work. "Camping Out," "Lost in the Woods," "A Taste of Maine Birch," and "The Tragedies of the Nests" are richly suggestive to children who spend their long summer vacations out of the city, and the recalling of their own experiences or their own intimate knowledge of the wild things of forest and field through such reading provokes some of the most spontaneous writing of the year. The following story handed in as one of the weekly compositions, when free choice as to subject was given, is one of the better examples of work of this sort.

"The Beauties of the Adirondacks

"The Adirondack mountains are clothed with a robe of beautiful evergreen trees, which guard and protect the deer, foxes, partridges, and other animals and birds that live under them and tread on the soft moss carpets, for such are everywhere except in dry places where the great pine and hemlock lend their needles to form soft beds. Through these green forests are paths made by man and also many paths made by the owners of the forests themselves, for such are the animals that live there. Most of these trails lead to some particular place, some to a clearing where the trees have been cut down for lumber; at times the clearings are caused by forest fires which are terrible in their effect, for the fire leaps up the dry trees and if it is windy there is hardly any way of keeping it from burning miles of lovely trees. In a clearing of this kind young and tender undergrowth which the deer like to feed on is very plentiful. I often visited these clearings and sat for hours just at sundown to watch the deer come in; they move very silently even when they are running, in fact, sometimes they would sneak in so noise-

lessly that I would not know they were present till my eye would suddenly fall on them feeding or playing together, sometimes jumping high in the air or running races with each other. They have very keen sight and can hear or scent you wonderfully well, consequently you must sit very still, for if they should have the slightest notion that some one is watching them, the mother or the first one to discover you would, with a bound and a snort, run away at full speed and the last that you would see of it would be its white tail bobbing up and down; people say that this is a signal to the young to follow. Other paths lead to lakes where the deer go to drink; these are very picturesque, especially in the fall when the maples' bright red and yellow light up the soft green of the conifers; there are also white birches which shine out like a lot of silver stars; the water is decked with green lily pads and in the summer when the lilies are in bloom it is a glorious sight, no wonder the deer like these beautiful lakes!

"Sometimes in the evening when you sit around the great flaming log-fire and tell stories of the trout you have caught, for there are quantities in the Adirondack lakes, or of the deer you have seen, you will suddenly hear a hoot or a screech owl that makes a noise like a panther in the distance; then all will be silent for a time and the stories will be more of bears, or the track of a panther which some one thinks he has seen and all of a sudden the hoot hoo hoo hooo-o-o will ring out plainly in the air again and you feel the cold shivers up and down your back till some sensible person says: 'There are no panthers or wild animals to fear in these woods: that is only the hooting of an owl'; which is very true, but it is nice to have an exciting moment like this, for it makes you laugh at your fears all the more afterward."

But our reading is not only a source of inspiration to thought, it gives help as well in the forms of writing. In all that we read we notice even in a slight way the characteristics of the writer's style, his felicitous phrases, and the swing of his sentences. Sometimes the boys and girls are asked to imitate a paragraph of description or narration, using some theme of their own but transferring the rhythm of the author's sentence, or perhaps part of his vocabulary, to their own work. This has been found

helpful to children whose power of expressing thought is crude or awkward. Our work in this direction as well as in others has been greatly helped this year by the use of *The School Speaker and Reader* compiled by William DeWitt Hyde. Its selections are so admirable that it has become a well-thumbed book, furnishing as it does selections for memory work, for reading and study, and for illustrative matter for the history lesson.

An interesting and profitable phase of our work is the "free" literature period once or twice a month when a portion of the class read or recite to the others. In this exercise the child is held strictly to account by his audience. He is there to give pleasure, and if he does not know what he has learned, or does not make himself heard, he is severely taken to task. It is here that the teacher has another opportunity to judge of the literary tastes of her class, individually and collectively, by what the individual chooses, and by what the audience approves. Here is a chance to suggest lines of thought which shall turn in a different direction the choice of those who prepare for the next "free" period.

As we review the work suggested here we are conscious that the results of our efforts are not always what our enthusiasm leads us to expect. A teacher must have after all something of the missionary spirit; she can plant and nourish, but the responses to the ideals of conduct or taste she places before her boys and girls cannot always be discerned by her. That these will some time bear fruit in thought or feeling or action is the end and aim toward which her teaching is directed.

C. W. H.

LANGUAGE

GRADE VII

The readers of the TEACHERS COLLEGE RECORD who have followed the papers on the teaching of English in the previous six grades will no doubt ask themselves when their eyes fall on this heading," What new points can there be left for the seventh grade to develop?" Indeed, little new in principle remains, the freshness being introduced by means of new material. The more advanced work in grammar, however, makes possible the cultivation of a more analytical attitude in regard to composition work, the children being led more and more to investigate the "why" as well as to see the "how."

In composition our aim this year, as in previous ones. is to train the pupils to express themselves freely, clearly, correctly, and as attractively as possible. With the first point we need concern ourselves but little. The children who have come up through the grades of our school usually get from the atmosphere of the school great freedom of expression, and comparatively few of those who enter the school in the upper grades long remain tongue-bound. It is in the attainment of the second and third points—clearness and correctness—that the teacher of composition wrestles with seventh grade pupils throughout the year. We find that in most cases when a child has been freed from self-consciousness, his inaccurate, vague expression comes from vague ideas, and the first step in clearing up expression is to help him clear up his ideas, to form a complete, distinct picture in his mind of what he wishes to express. Two ways are employed to accomplish this,—by leading the pupil to see by questions the facts necessary to express the truth, and by setting before him as a model some masterpiece picturing vividly the same idea he is trying to express. The truer picture of the master suggests what the student has failed to note and sends him back to readjust his own concept.

In pursuance of the foregoing aim it is economy of both time

and mental energy in written composition to choose a subject that has already been cleared up and in which an interest has already been aroused, such as some topic from history, geography, literature, or manual training. The children express their ideas through the three forms of narration, description, and letter-writing, the first two being used in both oral and written work. There is a natural demand for narrative and descriptive power in history, geography, and literature. Constant opportunity for the practice of oral reproduction in these fields offers itself in the topical recitation in these studies.

In reproduction, to help the pupil to get and hold the thought of an author, he is taught to make outlines, not intricate ones but those composed of a few large headings that he can easily carry in his mind and from which he can recite. For instance, in history he may be asked to get the substance of a paragraph entitled "Population of United States in 1790." Under this he may make three points—Number of inhabitants, Distribution, Large Cities. On these pegs he may hang all the facts of the paragraph. More minute analysis would confuse a child of twelve. While carrying on this analytic process, the class are also learning to build up their ideas logically in their compositions of all kinds, thus developing habits of orderly thought.

Other sources from which we gather material for reproduction are the lectures occasionally given in the school auditorium and those heard outside that have some connection with school work. For example, while the geography class were studying North America, Lieutenant Peary gave a lecture on his trip to the North, which one of the members of the class attended. The next day he reported to his fellows the substance of it. This sort of exercise we find valuable for clearness, as the inspiration of knowing that he is the one source of information for his hearers urges the reporter to do his best, and moreover, the listeners demand that the reporter make himself clear to them.

The subjects for narrative and descriptive exercises cover a large field, comprising personal experiences and imaginary incidents. The following are illustrations of the latter. After studying about the emigration to the West in the early part of the nineteenth century—the roads, inns, methods of transportation, and general condition of the country, the class was asked to write the diary of a boy or girl who made the trip from some

seaboard town to the Mississippi Valley. After reading Warner's *How I Killed a Bear* the pupils were asked to write of some imaginary encounter with an animal, working it up to a climax in the same manner as the model. In these imaginary writings the tendency of children is to be fantastic, and the test of probability has to be constantly applied to keep their writing sane.

In letter writing different sorts are brought in, friendly letters, business letters, and formal letters to government officials. As examples of these, last year the class wrote letters to an absent schoolmate; and later when they were studying the Revolutionary Period, they wrote letters to William Pitt, remonstrating against the oppression of the English Navigation Acts. In each case letters of the kind they were expected to write were read to the class and a discussion followed bringing out the points which made them good. After this they were encouraged to try letters of the same style as the model.

The school paper mentioned in the preceding articles on English furnishes in this grade also a great stimulus for written work, the children knowing that their productions may be published if worth while. We have found, too, that if the pupils realize that their essays are to be read in class they will make greater efforts to produce something interesting and well written.

But it is not only with the substance of the composition that we concern ourselves. We also lay great emphasis on the form in which it is presented. Only a few points are chosen, but these are drilled on incessantly until the teacher believes they become second nature to her pupils. The points emphasized are, general arrangement on paper, capitalization of title, quotation marks, possessives, and the simpler uses of capitals and punctuation. Most of these matters have already been taught in earlier grades, but repetition of them to the end of the elementary school course is necessary to fix them as habits in writing. Paragraphing, too, is taught in a large way, but not much stress is laid on it at this stage.

The correction of these compositions is carried on in the usual way, criticism of both oral and written work being made by both teacher and pupils directly after the recitation. In written work the papers are taken by the teacher for more careful correction. The mistakes are indicated at the end of

the essay as "three misspelled words," "two capitals omitted," etc., and the children are required to find these mistakes and correct them. One successful method used is that of collecting the compositions, putting them aside for a week or two until they have passed from the children's minds, and then handing them back uncorrected for the authors to read and correct. It is surprising to see the criticisms they make on their own work after coming back freshly to it.

This subject more than any other taxes the ingenuity of the teacher in inventing new ways for presenting old points that must be drilled on in season and out. As for any royal road or shortcut leading to all the desirable ends, we have yet to discover it. We are still looking for our Columbus to find the route that shall enable us to announce to the much-tried teacher of our language "English taught in one year."

Grammar. The grammar of this grade is closely allied to the composition so that the principles taught may find direct application so far as possible. The work of this year comprises the analysis of simple, compound, and complex sentences, and the recognition of the parts of speech in their more difficult forms, as abstract nouns, verbs of state and being, adverbs modifying adjectives and adverbs, etc. The knowledge of what constitutes a sentence is especially emphasized, as one of the most common faults in children's composition is the incomplete sentence. This comes about often through the insertion of a modifying clause in the main clause, the main one being left unfinished. This mistake is rectified most easily by teaching the pupils to consider modifying clauses as simply elongated adjectives or adverbs. The pupil will then readily see that the main clause with a modifier only is not complete.

Another illustration of the application of grammar to composition is its use in clearing up the difference between plurals and possessives. If the idea of adjectives is thoroughly understood it is easy to make the child see the difference, the plurals keeping the noun idea, the possessives assuming the modifying function. Again, after studying clauses and phrases, the children can be taught by throwing an idea of lesser importance into a subordinate phrase or clause, to vary their sentences from the monotonous compound joined by "and," "but," and "for" which is such a favorite of the average pupil.

A text-book, Buehler's *A Modern English Grammar* is assigned to this grade, but is used only for the exercises, definitions being worked out with the class. For extra exercises, and to make the children feel that grammar is not confined to the grammar text-book, but applies to all English, books of history and literature are used for purposes of drill. In some cases books have been made by the children themselves, which at the end of the year represent the ground covered. For instance, when the noun has been studied and some drill given, the children write in their books the definition that has been worked out in class and make sentences containing illustrations.

Spelling. An important part of English and one of the most difficult to teach is spelling. In the highest grade of the elementary school we are confronted with the task of turning out at the end of the year children who are good spellers. They may come to us with differing abilities, with different training, but when they enter the high school they are all expected to write correctly their vocabulary of several thousand words. A child may be poor in mathematics and still pass through life happily; he may trip on his facts of history and still keep the respect of his comrades; but woe to him who dares to tamper with the rules set down by Noah Webster.

With these facts confronting the teacher she sets about her task, resolved that when a class leaves her they shall go forth to trip airily through the intricacies of English spelling. The first step in accomplishing this is to awaken in the pupil a desire to conform in this particular matter to the usages of society; the next is to train the child to acquire accurate and deep mental pictures of words.

At the beginning of the year the teacher separates carefully the good spellers from the poor ones, then examines the poor spellers as to their manner of attacking spelling and classifies them, in her mind, as eye-minded and ear-minded. With the visualizers—the natural spellers—she need not much concern herself, as in their case spelling will pretty much take care of itself when careless habits have been broken up and good ones substituted. In their case the teacher employs methods to develop accurate perception. Any training that tends to care and thoughtfulness will clear up their defects. One method used successfully

has been to excuse from the spelling class any child who hands in papers in history, geography, composition, etc., correctly spelled, the absence from the class work continuing as long as the spelling of written work remains correct. It is surprising how the spelling of these naturally good spellers clears up under this stimulus.

The visualizers remaining in class are given constant exercises for acquiring accuracy. One means of doing this is for the teacher to write on the board the ten or twenty words of the lesson, the children selecting the difficulties of each. Then the teacher erases the words and dictates them. Another method employed is to assign a paragraph in history or literature, let the class look it through once, and then write it from dictation. Sometimes a column of twenty words from the spelling book is chosen, and the class is allowed two minutes in which to find all words with silent letters, words with double consonants, words of two syllables—anything that concentrates the attention on the form—and then are required to write the words from dictation. All misspelled words are correctly written in a side column of the blank book kept for that purpose, so that at the end of the week each child has a complete list of his troublesome words and does not waste time studying words already known.

It is with the ear-minded children that the teacher must do her most careful work. To a certain extent they too must visualize, but the amount of visualizing should be reduced to the minimum, if the children are to be trained to accomplish the greatest results with the least expenditure of energy, an economy aimed at in all modern teaching. The logical child is apt to be the ear-minded one. He spells as the word sounds and to a great extent always will, so we must help him along that line. Holding this sort of child to the whole word is almost labor lost, so we first emphasize division of words into syllables. The lesson for the day is placed on the board, and divided into syllables, then the attention is concentrated on the syllables with silent letters or troublesome diphthongs. After this the words are erased and the lesson conducted as those described above.

Beside the spelling book mentioned the material for spelling is gathered from various sources. The vocabulary of each subject studied is taken up—the proper names in history and

geography supplying legitimate material for spelling gymnastics. Every set of corrected papers furnishes matter for a spelling lesson, and then there are those mistakes that live from generation to generation, that an experienced teacher comes to respect almost as classics, such as distinguishing between plurals, possessives and contractions, forming plurals, the "ie" and "ei" combination, homonyms, abbreviations, etc.

The use of the dictionary is always encouraged. Every child owns a small pocket edition which he is at liberty to consult when writing any composition. This is allowed as we consider that an important point has been gained when a pupil knows that he does *not* know; and he remembers the word better because of the trouble of looking it up.

Whether the reader believes in the methods outlined above or not, he will surely agree that the only way to make good spellers is to be zealous in season and out of season, but that zeal without wisdom makes our labor nought.

G. F. B.

HISTORY

Grade VII

As will be seen from the paper on sixth-grade history, the work of that year comprises a study of the Middle Ages, emphasizing especially the spirit of awakening as shown in the discovery of America and in its exploration. Thus, instead of being suddenly plunged into the history of the United States, the pupils are led up to it logically and so get a perspective of their country in relation to the world. In this way they are prevented from forming the idea that the beginning of all things was in America and that all preceding us belongs to the prehistoric age; they are made to realize that our civilization is but a continuation of that of Europe, and that we used the best that had gone before us as the foundation on which to build our nation.

The sixth grade also makes a study of the period of colonization in North America. Here the seventh year takes up the history, beginning with the struggle between France and England for supremacy in America, and following with the development of the English colonies through their Revolution, their formation into the United States, and on to the present day.

From this vast field it is somewhat difficult to select the *few* topics that children of this age can cover. Many years of experience have taught the makers of the curriculum the foolishness of attempting to cover too much ground; that it is better to select a few topics, give a comprehensive view of each, be certain that the pupils' ideas are definite, and trust to the later courses of the high school and college and to individual reading to fill in the rest.

From the period of history allotted to this year, we have chosen the following topics, which are, we find, all that our children can well understand and elaborate in the time assigned—four half-hour recitations weekly.

Outline of Topics.

I. Overthrow of French in America.
  (a) French possessions.
    1. What brought French to New World.
      Desire for furs.
      Missionary zeal.
      Desire for land.
    2. Explorers—La Salle as a type (Parkman).
    3. Study of water and land routes to the interior.
    4. Settlements, with reason for location.
    5. Description of French life (Parkman).
  (b) English possessions.
    1. Reason for immigration to Mississippi.
    2. Natural routes to Mississippi Valley.
  (c) Conflict between French and English in America.
    1. Forts guarding routes between French and English possessions.
    2. Story of Braddock's expedition.
    3. Montcalm and Wolfe.
  (d) Terms of the treaty that affected America.
  (e) Lessons learned by colonists from the war.
    1. Consciousness of their own strength.
    2. Knowledge of each other.

II. Struggle for political freedom.
  (a) Industrial and social conditions about 1750.
    1. Agriculture { North. / South. / Middle States.
    2. Fishing.
    3. Commerce { Main lines and exchange of products.
    4. Manufacturing—rum and ships.
    5. Home life, education.
  (b) Effect of taxation on these industries.
  (c) Events leading to outbreak of war.
    1. Navigation Acts.
    2. Smuggling.
    3. Writs of Assistance.
    4. Stamp Act.

5. Quartering Act.
6. Tea tax and Boston tea party.
7. Boston Port Bill.

(d) Preparations for war.
1. Drilling of troops.
2. Gathering of supplies.

(e) Campaigns—objects and results.
1. Around Boston.
2. At the center.
3. In the South.
4. In the Mississippi Valley.

(f) Treaty.
1. Acquisition of land.
2. Fishing rights.

III. The forming of a government.

(a) Articles of confederation.
Weakness shown in financial troubles; international troubles; interstate troubles.

(b) Constitution.
1. Three departments—use of each.
2. Establishment of a revenue.

IV. Struggle for commercial freedom.

(a) Interference with commerce by France, England, and Barbary States.

(b) Struggle with England.
1. Battle of Lake Erie.
2. " between *Guerrière* and *Constitution*.
3. " of New Orleans.

V. Expansion and development.

(a) Acquisition of territory.
1. Louisiana.
2. Oregon.
3. Texas.
4. California.

(b) Industrial development in East.
1. Manufactures.
2. Iron and coal mining.

(c) Transportation and communication.
Roads, canals, steamboats, locomotives, post offices, express, telegraphs, cables.

(d) Development in West.
1. Mining—California.
2. Farming—Kansas.
3. Herding—Colorado.
(e) Resulting growth of great cities.
Chicago as a type.
(f) Reaction on East.

VI. Slavery and the South.
(a) Development of South.
1. Cotton gin calls for more cotton, more slaves.
2. Growing sentiment in North against slavery.
(b) Struggle to maintain balance in Congress.
Missouri Compromise.
(c) Struggle for territory.
1. Texas.
2. California.
3. Kansas-Nebraska Bill.
4. Dred Scott case.
(d) Secession and formation of Confederacy.
(e) Civil War.
Object of campaigns and results—one followed in detail.
(f) Reconstruction—only general features.

VII. Period since the War.

In the study of these subjects, while several lesser aims are held in the mind of the teacher, the main thing she wishes the pupil to have gained at the end of the year is an understanding and appreciation of and a sympathy with the institutions of his environment. With the facts of the life around him he has had a passing acquaintance for years; now he is led to inquire why these things are and how they came to be. It would be difficult for him to analyze these institutions at the present stage of their development; they are too complicated for him to understand as they now are, so he is taken back to the simpler forms which they had in the beginning. There he makes his start, following their evolution to the more complex forms of the present day, dwelling on the periods in which the institutions made their greatest growth. For instance, for the study of government we select the years directly following the Revolution, since at that

time governmental machinery was comparatively simple and it was then that the United States was most actively engaged in its development—creating and organizing departments, deciding domestic policies, and establishing foreign relations, thus making its most marked growth.

In thus following the evolution of an institution, another aim is achieved—the training of the judgment. The class study a certain period and certain conditions until they see the problem as nearly as possible as it presented itself to the people of that day and then are asked, "What would you do?" For instance, an accurate idea of the sufferings of our continental army that winter in Valley Forge, and the knowledge that there was plenty of food and clothing in the country but no way of getting money to buy it, force the child to the conclusion reached by the statesmen of that day when the Constitutional Convention was called, that fuller legislative powers must be given to the federal government. It is surprising how often the decision of the class is in accordance with that made at the time. We lay considerable stress on this sort of training as it is the kind of reasoning most often called into play in everyday life where problems are constantly presenting themselves.

Incidentally two other aims are kept in sight which the class must realize to make the work successful; first, the children should be aroused to such an interest in the subject that they will read of their own inclination, both history and biography. In close connection with this—as a result—comes the second aim, the acquisition of facts. The latter is an important one when considered as a foundation for the training of sound judgment, or the understanding of environment.

It is impossible to find all the historical material needed in one book, but the class are given Fiske's *United States History* as a text. This is supplemented by the library at school and at home, by magazines, and by information gained from parents and friends. Each schoolroom is furnished with a small library made up of books needed for daily reference. Some of these are owned by the school and some loaned for the year by members of the class. They comprise text-books, *real* histories such as Parkman's works, collections of stories such as *Historical Tales* by Charles Morris, and such compilations of source material as are within the grasp of the children, as Hart's *Source Book of*

American History and *How our Grandfathers Lived* or Mary Sheldon Barnes' books and *Old South Leaflets.*

Besides books, the pupils are constantly given questions the answers to which they find in the life about them, either in their own experience or in that of adult friends. For example, while studying immigration in connection with expansion, the pupils may be required to bring in a list of the different nationalities they have seen represented in New York, or in discussing the question of United States revenue, they may be asked to give sources of revenue that have come under their notice, or to which they often contribute. The child's experience is a source especially drawn upon in the study of government and industrial matters. This is valuable as it calls attention to the life about him and puts him in an inquiring attitude towards his environment. It also enlists the co-operation of the home, which is a valuable asset in teaching any subject.

The methods of conducting the class work vary. When facts are to be learned or a story told, topical recitations are carried on, the pupil reciting from an outline previously prepared by himself as explained in the article on seventh grade "Language." After this, points are cleared up and interpretation of facts discussed. At other times questions are given for home preparation and the answers discussed in class.

This year, to fix in the mind of the pupil the facts he should know, five-minute drills have been given at the beginning of the lesson. These correspond to the quick drills given in the arithmetic class, being designed not so much to bring out principles and large matters as to fix facts accurately in the memory. Something like this may be required: "Give the terms of the Missouri Compromise," or "Name the states divided by the Mason and Dixon Line in 1821."

As to the connection of history with other subjects, that of history with geography is so close that is it difficult to separate them at times. This is especially true when the subject is expansion, or when some phase of industrial development is under consideration. The pupil must have a clear idea of the physical conditions of the country, its relief, climate, waterways, and resources, to understand the migrations and the industries that have grown up in different sections of the United States. Unless he has a knowledge of the rugged surface of New England,

with its many waterfalls that may be utilized for power, he cannot explain the development of that region as a manufacturing section. If he would understand the direction of migrations westward, he must know the mountain passes and rivers of the country. Often a direction of this sort is given, "Take your atlas and find the reason why Ohio, Indiana, and Illinois were settled before the other states of the Middle West." In return for the assistance that geography thus renders in the teaching of history, the latter helps to fix geographical locations and the names of political divisions, rivers, mountains, and lakes.

Besides this aid given to geography, history furnishes a large amount of material for composition both oral and written, and is also in close relation to spelling, as has been shown in another place.

As an outline of the year's work to be used in quick reviews, a note-book is kept by each pupil in which are placed outlines of work done, the maps drawn, names of places occurring in history, names of famous men, and the principal dates to be remembered.

Realizing how strong an impression an appeal to the eye makes, we have made a collection of pictures illustrating the famous men, scenes, and places to be used in connection with history. These are gathered by the children from many sources —the magazine being a common one—and are mounted and catalogued according to periods. Also excursions are frequently made to places of historical interest, and the museums are utilized whenever material is found there to supplement the subject under consideration.

G. F. B.

GEOGRAPHY

Grade VII

Geography and history form two of the most humanizing studies in our elementary curriculum. "They are the stage and book of God's household—history the book, and geography the stage"—and as the man in the book moves only upon the stage, and the stage controls and prompts the energies of man, it would seem as if whoever studied one without the other would understand neither. The dominant thought then, in our teaching of geography is that the earth is the home of man, and though for purposes of instruction we fix our attention for periods of time upon purely earth forms and phenomena, yet a real geographic interest is developed and sustained only when these phenomena furnish us with an explanation of the varied activities of the different regions of the globe and of the characteristics of the people who inhabit them.

Our course in geography in the elementary school therefore, falls naturally into two main lines of instruction; first, the teaching of certain essential geographic facts and relations which should be the property of every child who leaves the grammar school; second, the teaching of simple geographic principles, causes, and consequences which explain and elucidate these facts and others which the child in his ever-increasing maturity will continue to acquire. While these two lines of thought run parallel throughout our work in the grades, it is evident that the emphasis on the second should be laid in the sixth and seventh years. That is, up to the sixth year the child is acquiring facts of value, the "why" is not neglected, but we do not bear down hard upon it. In the sixth and seventh grades the controlling purpose is changed; facts must still be taught and many of them, but they serve largely to illustrate the study of causes and consequences and the larger relations which lift geography into the higher level of a disciplinary and cultural study.

A child who has studied geography in the fourth, fifth, and

sixth grades of the Horace Mann School comes to the seventh grade with a fair general knowledge of the six continents, with a more thorough acquaintance with some important localities and trade routes, and with a few simple principles of geography and physics which he is learning to apply to the solution of geographic problems. Thus equipped he is set to work on his own country and the continent in which it lies, in order that he may have, before leaving the grammar school, that more intimate knowledge of the physical conditions and human activities of the United States and its neighbors which it is his right to claim.

The relation of geography to history in this year is very close, not from any effort to teach the facts of the one and the relations of the other at the same time, but because these relations are so real that the facts continually bear one upon the other. In geography the boys and girls study the stage across which the characters in the history move. Marquette and La Salle cross the portages between the St. Lawrence and the Mississippi, and step by step we follow them down the stream, finding traces of their journey in the French names with which the map is sprinkled. Or we examine the locations of Fort Stanwix and Fort Edward as we come to Burgoyne's campaign. Both forts are found to be similarly located: Fort Stanwix on the bend of the Mohawk to the portage leading to Lake Ontario, Fort Edward, where the Champlain trail strikes the elbow of the Hudson. The reasons for fortifying these points are brought out in the history lesson. The question why Fort Edward is to-day an unimportant town, while Rome has a population of over 15,000, is purely geographic, and its answer involves a principle which comes to the front again and again as we discuss the location and growth of Erie, Niagara, Pittsburg, Chicago, and St. Louis.

It may not be amiss before giving the outline of the work of the year to formulate some of the principles which are reviewed and taught during the year. For lack of space I have selected only a few of those to which we most often refer for an explanation of the facts and phenomena we study.

(1) As warm air is able to hold more moisture than cold air, a wind blowing from a cooler to a warmer region will be a drying wind; hence the trade wind belt is a belt of deserts.

(2) As water takes longer to heat and cool than land, a

wind blowing from a body of water on to the land will modify the temperature of the land; hence the western coasts of continents in the belt of westerly winds have a more equable climate than the eastern coasts.

(3) Regions similar in climate, soil, and drainage will have similar occupations.

(4) Manufacturing towns are likely to grow up near coal mines, as it is found cheaper to transport raw material than fuel.

(5) The presence of a mountain pass or water gap is favorable to the location of a road or town. Many battles have been fought for the possession of such a town or pass.

(6) The chief reasons for the location of towns are: a good harbor, the mouth of a navigable river, the head of navigation, a bend in a river, the presence of falls, nearness to mines, the junction of roads or rivers, a necessity for a break in transportation.

The outline given below presents the work of the year; not every topic, however, is treated with equal detail. As a rule those most emphasized are: the New England States, the Middle Atlantic States, the Coastal Plain of Eastern United States, The Northern and Central States of the Mississippi Basin, the Arkansas River as a type of a "Plains" stream, the Plateau States, and the Pacific coast States.

North America.

(General.)

Size, Position, Coast-line.

Relative size of continent.

Relation in general to temperature.

Latitude—Influence of nearness to pole on expeditions of discovery.

Longitude—San Francisco nearly midway between St. Johns and the westernmost of the Aleutian Isles.

Coast-line—Eastern and western compared as to harbors, outlets for commerce, necessities of defense. The continental shelf: where broad, narrow, value as fishing grounds. French fishermen discover Grand Banks. Chief bays, islands.

Surface.

Cordilleran and Appalachian	Highlands	Location and extent of ranges. Influence on occupation and settlement.
Central and Coastal	Plains	General character. Relation to settlement and occupation.
Drainage and Divides	River basins of Pacific and Atlantic coasts and Central Plain. Rivers as highways into interior. Routes of early explorers.	

Climate.

Position as to heat and wind belts.
Temperature and rainfall.
East and west of 100th meridian.
Influence of winds, currents, and mountain ranges.
Oceanic and continental climate compared.

Life.

Tundras.
Regions of conifers and deciduous trees.
Tropical forests.
Arid regions.

} The characteristics of plant and animal life, and of man and his activities in each region.

The first lesson of the year is generally an exercise in map reading, its object being to test the ability of each child in this direction, to extend his knowledge and use of maps, and to acquaint him particularly with the contoured sheets of the United States Geological Survey. These maps offer such splendid illustrations of the relation of man to his environment that we can ill afford to pass them by when we are trying to emphasize certain geographic relations. The points covered in this exercise are as follows: the meaning of scale and how it is expressed, the interpretation of colors and other symbols, the meaning of contour lines, the method of indicating latitude and longitude, and how to orient a map. The methods of expressing scale—1 : 40,000,000 or $\frac{1}{63,360}$ are explained and maps of different scales are examined and compared. Questions are asked which will test the understanding of colors and other

map symbols. Then we take an excursion across the river to the Palisades, armed with a compass and a contour map of the locality. The meaning of these lines is apprehended as we climb the cliff and reach the plain on top. At a convenient point on the westward slope of the Palisades we obtain a view of the Hackensack Valley and the Jersey Highlands. Here we orient the map by means of the compass, point out the large features we see, and measure the height we have climbed and the distance we have walked. When we return to the schoolroom the map is oriented on the table and the direction of these features again determined. We then draw our meridian line on the floor and fix the direction of well-known points such as Brooklyn Bridge, Newark, Sandy Hook, and Albany. We find the latitude and longitude of New York from the map, and its approximate latitude and longitude in Europe and South America. This gives the opportunity to review the notions already gained of the relations between latitude and length of day, and our meridian and the noon-hour. Other opportunities to review connections between these facts and their relations to life are abundant. When Tom leaves the geography class and takes a trip to Mexico, the settlement of the question "To what hour do the hands of Tom's watch point at this moment?" awakens spontaneous interest; and when longitude and time are studied in the arithmetic class the value of these facts and their relations is again emphasized.

The general treatment of North America which precedes a detailed study of the United States is largely in the nature of a review. Facts and principles learned in earlier years are brought into requisition, and as the new data presented will be recalled and fixed by repetition and enlargement later, only a short time is spent on the outline just given. The topic of *climate* receives special emphasis, for an understanding of its causes and consequences is the key to a large number of problems we have to solve; besides this, no other topic affords so excellent an opportunity to collect and study facts, and to predict and search for consequences.

An example of how the chief facts about the temperatures of North America are collected is given below. The results are taken from a paper of a seventh-grade boy and are accurate enough to enable him to draw correct conclusions. Each child

is provided with a map of North America, one of the United States, and temperature maps of the world showing the isotherms of January and July.

TEMPERATURES OF NORTH AMERICA

Sections	Places	January	July	Range
West Coast	Sitka	30°	60°	30°
	Vancouver	30°	60°	30°
	San Diego	52°	65°	13°
East Coast	Nain	10°	50°	40°
	Quebec	20°	60°	40°
	Charleston	50°	80°	30°
Central Plain	Port Nelson	—10°	50°	60°
	Winnipeg	10°	60°	50°
	Vicksburg	40°	80°	40°

From these data the conclusion is drawn that the western coast of North America has in its northern and central portions a warmer, more equable climate than the eastern coast, and that the central part has greater extremes than the other two. Recalling what we have learned of the climate of Europe and Asia, we find we have here a direct consequence of a general law, that the interior of a continent in the belt of westerly winds has greater extremes of climate than either coast, and that the western coast is warmer than the eastern. The causes that produce this result are then sought for and some effects of these physical forces on life conditions are suggested. Our boys and girls are always very responsive in enriching such instruction with their own observation and experiences, for many of them travel extensively and the majority read the best magazines and newspapers.

Along with this work of development go the drill exercises which help to fix important data. Outline maps are filled in with facts of climate, surface, or life; a written statement of the general law involved in each case and its application to this continent is asked for; a list is made of each vegetation region with the name of a characteristic plant or animal in each.

and the locality where it may be found; a written description of life in one of these regions, with an accompanying sketch in color or pencil, is often made. In fact this kind of work is as varied as the ingenuity of the teacher and pupils makes possible; the results form excellent material for drill questions which rouse a class into an attitude of alert attention.

After this general work on North America, we proceed to detailed study of the United States.

United States.

Location and Size—Boundaries, use of parallels and meridians in fixing boundaries. Relative size compare with Canada, Brazil.

New England States.

Name and location of States.

As a part of the Appalachian highland. The White and Green Mountains, Mt. Katahdin. Rocky uplands and pastures, rich river valleys and sandy plains. The presence of boulders and stone walls.

Indented coast making for harbors.

What the industries are—how influenced by climate, soil, character of rivers, coast-line.

Compare climate of Boston and Burlington with New York. Where farming pays and what crops are raised; tobacco in Connecticut valley and Virginia.

Why manufacturing and commerce have developed. How coal from Pennsylvania reaches factories. What raw materials are sent into the region. Fishing centers.

Centers of Population.

Seaports, manufacturing towns, commercial centers, fishing towns, summer resorts.

Chief routes in and out of sections.

Throughout the course frequent use is made of photographs, of lantern slides,and of the excellent pictures in Dodge's *Advanced Geography*. During a lesson with the lantern a distinct

effort is made to associate the picture shown with the locality, and such a lesson is always followed the next day by a review of the points made and the pointing out on the map of each locality named.

From these sources the children get a notion of the rugged New England upland, the rich open farming valleys, and the indented coast. From the text they read about the glacier that once spread over this part of North America, accounting largely for its diversified surface, and they see that because of this diversity farming cannot be carried on as in the extensive prairies of the middle West. They find the reasons why this section has developed manufacturing and commerce, and in accounting for the location of some of the large towns they begin to formulate general principles influencing settlement and occupations which will come up repeatedly in further study.

Middle Atlantic States.
- Size, position, climate.
  - Largest in area, in population.
  - Position in glaciated area—infer as to diversity of surface.
  - Compare with New England in climate.
- Surface, industries, cities.
  - The Adirondacks.
    - Summer and health resort—hunting, fishing, lumbering—conservator of Hudson waters.
    - Manufacturing towns on slopes.
    - Champlain pathway.
  - Mohawk-Hudson Valley.
    - Easy grades from New York to Buffalo and West compared with routes across Pennsylvania. Influence of this on development of New York. Commercial routes.
    - Scenery and industries along Hudson.
  - *New York City.*
    - Extent, surface, boroughs, water front, commerce. Manufacturing, financial, and educational center.
  - Mining industries of Allegheny plateau and mountains.
    - Mining and manufacturing centers.

How coal is distributed to New York and New England.

How iron ore from Michigan reaches Pittsburg, Norfolk, Baltimore, Philadelphia.

Southern States: North Carolina—Texas.

Names of states—location.

Climate—temperature, winds, rainfall of Norfolk, Charleston, New Orleans.

Surface—Atlantic and gulf coastal plain—Appalachian highland.

Products and Industries—staple products, forests, mines, black belt, truck farms, etc.

Seaports—commercial centers—routes.

Influence of climate and soil on history.

The emphasis in this section is on the great agricultural area of the Coastal Plain, a region whose parts are essentially similar in climate, soil, and drainage, hence also similar in occupations, though the crops may differ in response to minor variations of soil and climate.

In order to vary the method of presentation from that of preceding topics a set of printed questions, such as is shown below, is given to each child with references to text and atlas to help him work out little problems unaided; a certain amount of class discussion, however, precedes the work he is expected to do by himself. Each pupil writes his answers on a separate sheet and a part of each lesson is devoted to the discussion of these results. We do not expect that all the facts asked for will be remembered. The chief value of the exercise lies in working it out, for even if the facts are forgotten the child is learning where to go for geographical information and how to use what he acquires.

Before giving this question paper to the class, a general idea of the surface of the Coastal Plain is given them by the teacher, aided by a good physical map and pictures of the pine barrens of New Jersey, a cotton field in Georgia, a stretch of tide-water in Virginia, or of rice fields in South Carolina. A United States Geological Survey map showing the coast features is also used

a little later. A cross-section is drawn on the board showing the sky line from the Blue Ridge across the Piedmont and Coastal Plain to where the gentle slope meets and passes under the ocean. Pictures and maps are compared with this diagram, and Piedmont, fall-line, plain, shore-line, lagoon, and sand-bar become familiar. The boys and girls are quick to perceive the relation between the rapids at the fall-line, the head of navigation, and the manufacturing towns there, as well as the equally close relations between climate, soil, products, and industries.

The children show great interest in the study of the coast features, for many of them summer on the Long Island or New Jersey shore, and have fished in the lagoons, visited the light-houses, or watched the life-saving crew patrol the dangerous coast. They recognize that what is true of the shore that they know is a characteristic of the eastern and southern coasts of the United States; they learn to what to attribute the lack of harbors on long stretches of sandy coast, and appreciate more fully the importance of the drowned valleys of Chesapeake Bay, Charleston harbor, and others like them.

The Atlantic Coastal Plain.

Map[1] 11. 1. Examine the eastern slope of the United States from New Jersey to Florida and from the Appalachian Mountains to the Atlantic. What part of this slope is hilly, what part low and nearly flat?

Maps 11 and 13 2. Study the coast and make a list of the special features you find. Underline those you have seen either on this coast or elsewhere. How is such a coast made less dangerous for passing ships? What are the chief occupations of the people who live on the New Jersey shore?

Map 11. 3. Trace the range of hills that marks the inner margin of this plain. How high are they? How do they differ from the Palisades in appearance?

[1] The maps referred to are in Longman's *School Atlas*.

4. Name the states through which these hills run. Make a list of the larger rivers that run across these hills to the ocean. Examine the mouths of these rivers. Does the tide run up all of them? Why does the Roanoke have no town at its mouth?
5. Where is the head of navigation on each river? What reason can you give for the location of so many towns at the Fall-line? Fill out the following chart for the States from North Carolina to Alabama.

States	Rivers	Towns on Fall-line	Seaports

6. On an outline map write the name of each State and indicate the head of navigation of one river in each State. Locate Charleston, Savannah, New Orleans, and Galveston.

Maps 4, 5, and 15.

7. On the margin of your map write the January and July temperature and wind direction of Charleston and New Orleans. Write the yearly rainfall of these places.

Maps 142, 144–146, 148.

8. Write on your map the products of the Coastal Plain area of these States, and color the States which rank first in the production of cotton and sugar.
9. Which is the largest city of these States? Is it in the Coastal Plain area? Which State has the largest population?
10. What advantage has New Orleans for the export of wheat over New York? Any disadvantages?

It is by some such procedure as this that we acquire the encyclopedia and atlas habit. This habit is easy to develop in many children. I do not say we succeed in training all of them to be alert and persistent in acquiring geographical information in this independent fashion, but we put the stimulus there and hope for results. I recall an example of untiring effort after a

fact of geography which roused our boys and girls to admiration. The question came up why Cape Disappointment at the mouth of the Columbia River was so called. Two boys were chosen to hunt for the answer and recourse was first had to that useful pamphlet entitled "On the Origin of Place Names in the United States." A partial answer was obtained, but the class was not satisfied. The boys were then directed to our college librarian and were told by her to look in a volume of memoirs of the captain who named the cape. Part of the play-time that afternoon was used in going to a well-equipped library near by to look for this book. After a long wait, occasioned by the necessity of hunting out unused and dusty volumes, the attendant placed the book before the boys, remarking in rather an exasperated tone that the book was in French, and old French at that, and could not possibly be of any use to them. "Oh, but we can read French," the boys joyfully replied, and the next day saw them triumphantly relating their experiences as well as the desired information to their expectant comrades.

Central and Northern States of the Mississippi Basin. Prairies and Plains.

Sequence of topics as found in Dodge's *Advanced Geography*, pp. 152–165. Points especially emphasized are:

1. Fitness of climate and soil for raising great crops and herds. The influence of this and the amount of rainfall in determining industries.
2. Commercial importance of the great lakes and the Mississippi, and their influence on our history.
3. Reasons for the location of the great cities—Chicago, Duluth, St. Louis, Omaha, Kansas City.
4. Traces of French and Spanish occupation.

The Arkansas River, a type of a "Plains" river.

Upper portion—torrential, the Royal Gorge, occupations.

"Plains" portion—disappears in sands; shallow valley; farming where wells can be dug—windmill the feature of the country. Population scanty.

Lower portion—a normal river as it enters region of more rainfall. Occupations.

The Plateau States.

Colorado taken as a type of a Rocky Mountain state. Relation of surface to occupations. Scenic and health resorts. Commercial and mining centers. Routes from West to East, use of mountain pass by railroads.

Pacific Coast States.

Size as compared with Atlantic States.

Cocation—approximate latitude of Seattle and San Diego.

Llimate—Review of the work done on the climate of the coast in the general study of North America.

Surface—Ranges, valleys, arid portions. Influence of ranges on rainfall.

Industries—Fisheries and lumbering of the Columbia. Wheat farms, big trees, fruit farms of southern California, desert products.

Cities—Towns of the Sound Valley, southern California. Importance of San Francisco harbor.

Trade Relations—West and south with the Pacific. Trunk lines to eastern coast.

I have tried to show in the preceding pages that our lessons are not assigned directly from a text-book as so many paragraphs or chapters to be learned, but that the text is a reference book to be used in the answering of questions or the solving of problems. These answers are found not only in the written text, but in the maps, pictures, and diagrams which illustrate and enlarge the text, and in the reference tables in the appendix which contain statistics and comparisons of value. The following questions show one use to which such an appendix can be put, the exercise serving as a review of some of the larger facts in connection with the United States.

REVIEW EXERCISE BASED ON THE REFERENCE TABLES IN APPENDIX. (Partial list of questions.)

1. Make a list of the countries of North America and opposite each write its population.
2. How many States and Territories has the United States? Name the largest, the smallest.

3. Which state is most densely populated? Which has the largest population?
4. Make a list of all the States which have any sea-coast.
5. Locate the first ten of the twenty-five largest cities of the United States.
6. Which of these *ten* are included in the twenty-five largest cities of the world?
7. Which of the cities in answer to No. 5 were cities in 1783?
8. From the "twenty-five cities of the United States" tell those you have visited or passed through. Locate each.
9. Underline those cities of the twenty-five largest of the world which are capitals.
10. What are the chief products of the United States? Which of these are chief exports?
11. Make a list of the chief imports to the United States, and opposite each the country from which it comes.
12. What country surpasses the United States in the value of exports?

The next topic is the dependencies of the United States—Alaska, Hawaii, Porto Rico, the Philippines. The treatment of these countries is brief and follows the text in Dodge's *Advanced Geography*, pp. 174–181.

The Dominion of Canada.

General review of surface, climate, drainage, and plants and animals, from the work done in North America at the beginning of the year.

Nova Scotia, Prince Edward Island, New Brunswick.

Occupations—fisheries, mining.
Towns—Halifax, St. Johns.

Quebec.

Industries.
Cities—Montreal, Quebec.
Trade routes.
Attractions for tourists—scenic, historical.

Ontario.

Influences of location and climate on "The Garden of Canada."
Products.
Cities—Ottawa, Toronto, Port Arthur.

Manitoba.

Wheat area.
Winnipeg—commercial importance.

British Columbia.

Scenery.
Forests and mineral wealth.
Canadian Pacific Railroad.

Mexico.

Influence of surface on climatic belts.
Hot lands.
Temperate lands.
Cool lands.
Rainfall of east and west coasts and interior plateaus.
Variations in products responding to climatic differences.
Mineral wealth.
Trade and cities.

Central America and West Indies.

Questions and Exercises based on text, pp. 196-200.

After our lessons on the different countries of North America have been completed, it remains to gather in a general survey the parts we have been considering. From six to eight lessons are given to this review and the work is based on the pages in our text-book devoted to a summary of the world's commerce and industries. We examine the maps showing the great food producing areas and mineral regions of the world and compare them with each other and with the United States in location, extent, and importance. This comparison has not been omitted, however, in our sectional study; we turned to the industrial towns around Essen and Birmingham when we were learning about the manufacturing industries of Pennsylvania, and we contrasted our great railroad centers of Chicago, Buffalo, and

New York with Paris, Vienna, Berlin, and London. The chief object of this final summary is to consider the United States in its world relations, and as a world power. The reasons for its rapid advancement and acknowledgment by the older countries will not be difficult for any boy or girl who has faithfully done his part in the preceding work of the year.

Our geography teaching would fall short of one of its chief purposes did it not cultivate a real geographic interest in our boys and girls—that is, a wide-awake habit of looking out for items of geographical information in what they read or hear or see. Twice each month we spend half an hour on current events, and these lessons contribute largely, we believe, to the stimulation of this habit of mind. To this lesson each pupil brings the morning newspaper and the hour is spent in hunting for geographical news, locating places named, and discussing the event.

The outcome of the lesson is a record of current events kept during the week following by those who volunteer or are appointed as class representatives. The record is accompanied by a map on which the localities named are noted. At the end of a week the record is read before the class, the importance of the events discussed, and the places pointed out on a map of the world. In deciding whether the news item is of sufficient geographic value to be recorded the child's judgment is called into action. During the week that the record is kept the number of cuttings from the daily papers brought to the teacher's desk to be handed over to the recorders attests to the lively interest in this sort of geographical study.

Throughout the varied program of work thus outlined we aim to make the study of geography a living and attractive thing. The young student may forget a good deal of what we teach him, but he has learned how to use the common sources of geographical information that are at his hand, he is acquainted with certain fixed relations between our earth and the life upon it, and we feel confident that he will carry away from this study something of that lively interest and habit of investigation to foster which has been one of the larger aims of our instruction.

C. W. H.

ARITHMETIC

Grade VII

The seventh year of the elementary school should find the pupil ready to complete the usual course in arithmetic so that he may be ready to begin algebra in the following year. In the preceding grade he has studied the four processes of addition, subtraction, multiplication, and division, with integers, common and decimal fractions, percentage, and simple interest, with a large variety of applications. At the beginning and the close of each year he has reviewed the subjects directly preceding and has been carefully drilled all along the line. He is now ready for a complete review so that he may understand not only the processes involved in his problems, but, in a more mature way, some of the principles underlying those processes. In other words we must gather up and weld together the knowledge of operations and of numbers which he has gained during these six years of his school life so that he may, if possible, enter the High School with a well-rounded idea of his course in arithmetic.

This is our ideal, but there are practical difficulties in the way. Unity of thought is seldom gained even by mature minds, and our boys and girls with their immature way of looking at things will, after all, get their knowledge in a fragmentary way in spite of our best endeavors. Many pupils enter the school for the first time just at this point. Others have lost somewhere along the line weeks perhaps, months, of the regular work. Occasionally a bright pupil is promoted from the fifth year to the seventh, trying by a few months of tutoring to fill in the gaps in the complete course over which he has literally "skipped." These practical hindrances in a fair and well-rounded scheme of education will always exist perhaps here, in a great city with a floating population, more than in other places. Few schools in fact keep for seven years a class of pupils intact. There need be no discouragement in this. It is because of these conditions that we need just here in the seventh grade even a more comprehensive and thorough review than in the preceding years. Then,

too, it is at this point in a child's development that he is ready for a more reflective study than in the lower grades. It is a period of very active growth of mind and body and of ever increasing consciousness of self. This leads to a timidity in attacking problems which younger pupils do not feel, and which can be overcome only by a clear understanding of principles and by explaining again and again to themselves and to others the difficult points involved. It is because of this make-up of the class that we must in our review of arithmetic teach again and again subjects supposed to have been mastered.

Of all the subjects taught in school perhaps the one least called upon during a child's vacation is mathematics. At the close of four months of freedom from school our pupils' minds are quite blank on the subject of arithmetic and quite ready to begin again some of the simple work in numbers. The subject of numbers and their written symbols is introduced at this stage from a fresh point of attack by giving a slight sketch of the history of the use of figures, and, the interest of the pupils being thus sharpened, a good deal of drill on reading and writing numbers is given. Blackboard work is used to a large extent in the class work with the object of concentrating the attention of the entire class on the points developed. Individual pupils are called upon to write and read different numbers, reviewing in this way Roman and Arabic numerals, the use of the decimal point, the use and value of the zero in writing numbers, the use and significance of the line between numerator and denominator, the use and significance of the parenthesis, etc. Each pupil is encouraged at this point to ask the right sort of question, and discouraged from asking the question which reveals lack of attention and thought. All honest attempts to get more light on the subject are approved, while the "lazy" or "showing off" question is sharply rebuked. Not many lessons are needed on this kind of work, since the reading and writing of numbers will be continually practised in the subsequent lessons. Addition is next reviewed, and the principle is again emphasized that only like units can be added. We let the pupils invent for themselves problems illustrative of this principle. Much rapid drill is given in adding columns and in checking by adding in the opposite direction, and always there is a time limit for such work. This is in the interest of accuracy as well as of rapidity. The

work in addition is continued throughout the year by frequent five-minute drills.

Just a word should be said on the importance of the quick drill. If, at the beginning of every daily recitation in arithmetic, a few minutes are devoted to some variety of abstract work, it will be found to accomplish several very important results; first a preparation of the mind of the pupil for active attention to the work in hand; second, the gaining of facility in handling numbers; and third, a sense of power which will go far towards making arithmetic a live and interesting subject to its possessor instead of the bugaboo it often becomes, causing many a bright boy or girl to shrink from any question of his daily life involving the use of numbers.

Having cleared up the subject of addition, we take the opposite, subtraction, letting the pupils state for themselves the principle that only like numbers can be subtracted, and encouraging as many applications as possible of both addition and subtraction to the questions of daily life. The pupils write original problems involving the use of addition and subtraction, and then submit these problems to the class, placing their work on the board for criticism under these heads: "Is the problem a real one?" "Is it reasonable?" "Are the prices or statistics given such as would actually exist?" "Is it up-to-date?" "Is it worth finding out?" "Is it difficult enough to justify giving it to boys and girls of our age?" This sort of work creates keen critics and makes the pupils ashamed of presenting unthoughtfu or slipshod work.

The five-minute drill now involves subtraction as a check on addition, and vice versa. The Austrian method of subtraction is taught, although no one method is insisted upon. If the pupil has the habit of subtracting rapidly and accurately, it is hardly worth while at this stage to change his method.

Multiplication needs, besides the kind of work we have done in addition and subtraction, a careful development of the abstract quality of the multiplier. Pupils often reach the seventh grade without a clear notion in this matter, and such statements as "25 men × $1500 = $37,500" are not only used in the written work but quite often defended. After the principle is clearly understood no statement of this kind is tolerated by teacher or pupil. If pupils are sent frequently to the blackboard to explain

problems and are required to give a reason for each part of the process used, such careless handling of numbers can be eliminated by holding each member of the class responsible for detecting any error in the written or oral statement of the one explaining. Here again we find the five-minute rapid drill desirable in the review of multiplication. We do not drop addition and subtraction entirely, but vary the work by introducing multiplication. The rapid counting by two, three, four, five, six, etc., used in lower grades is reviewed again, and its use is made interesting by letting the pupils time one another and strive to "break the record" for counting by three, four, etc., to a hundred in the shortest possible time. We are obliged to handle this matter of counting with some care lest our nervous American children overdo the competition element, but if carefully managed this can be made interesting to active boys and girls. The five-minute daily drill is not exclusively oral. Written work with a time limit is also introduced, and abstract examples are placed on the blackboard, or occasionally dictated.

Division is reviewed with the same care as multiplication, and the principle is developed, if necessary, that the quotient of a concrete dividend by an abstract divisor is a concrete number; also that a concrete divisor can be contained in a concrete dividend only an abstract number of times. Nearly all seventh grade pupils are mature enough to understand this, and all must be made to conform to mathematical usage on this point in placing work on paper. Ratio is sometimes introduced here as a special form of division, and we review the division tables through such questions as "What is the ratio of 108 to 9?"—"of 12 to 108," etc.

Thus far we have dealt with whole numbers in our review. We now review again the fraction, rapidly considering the use of the symbol, the meaning of the terms numerator and denominator, and the four processes, addition, subtraction, multiplication, and division. We find and apply the same principles as in our work with integers. A thorough review of business fractions is needed, however, and for our five-minute drill we vary our rapid use of the four processes by letting the pupils give the fractional equivalents of these fractions, or the fractional equivalents of the common per cents., as they are rapidly dictated. Other drills are given in finding without the use of pencil, 50% of a given list of numbers, 25% of another list, and

so on. These drills are given until the pupil thinks of ⅛ whenever he hears 12½% and so on. The only two cases in percentage of much practical importance, i.e., finding a per cent. of a number, and finding what per cent. one number is of another, must be dwelt upon long enough to leave no uncertainty in the minds of the pupils as to the solution.

About three months of the school year is spent in this thorough review and in the study of fundamental principles. This may seem an undue proportion of time, but we find it well spent. If we are to send pupils to the high school with a well-rounded knowledge of arithmetic we cannot afford to slight this part of the work. The pupils themselves see the value of it and, although eager to begin business arithmetic, are usually quite ready to admit the necessity of a careful review.

We are generally, however, at the beginning of the fourth month, ready to take up the new work of this grade, a study of business operations and forms. The pupils have in a simple way studied interest in the sixth grade as a form of percentage, the money invested being the principal for the use of which a number of hundredths is annually paid the investor by the bank. We are now ready to study the different kinds of banks in which money may be invested. The boys of the class, and often the girls as well, already have a slight knowledge of banks and are easily led to group them under three common heads—the Savings Banks, Banks of Deposit, and Trust Companies. They learn that the Savings Banks as a rule pay interest, while the Banks of Deposits commonly do not. The functions of the Deposit Bank and the combination of bank functions in the modern Trust Company are developed. We establish a bank in one corner of the schoolroom and appoint as tellers the most accurate and rapid computers in the class. The Bank of Deposit is chosen as the type of bank to be illustrated, because this will give the best opportunity for practice in making out business papers of various sorts. Before the school bank is put into actual operation some further instruction is given in the use and value of the Savings Bank and the method of computing interest. The pupils are led to find simple interest at different rates. The rate common to New York City is most frequently used, and information is immediately forthcoming as to varying rates used in our city. The common method of computing interest, by finding

$\frac{1}{12}$ of the annual interest to get the monthly, and $\frac{1}{360}$ to get the daily interest, is shown, and considerable practice in this method is given. For rapid drill work the pupils now practise giving quickly the interest at varying rates for varying times on varying principals as follows: The interest on $2000 at 6% for 2 years, on $2500 at 5% for 3 years, for 6 months, for 4 years and 3 months, etc. The pupil is led to see that the interest at 1% = $\frac{1}{100}$ of the principal; at 6% 6 times as much; for 2 years twice that; for 6 months $\frac{1}{2}$ as much as for 1 year, etc. After thorough drill on the general method of computing interest, the 6% method is shown, the pupils having found from experience that an easier method is needed in cases where the interest for the uneven number of months and days is to be reckoned. That a rate of 6% for a year means 1% for 2 months is developed. The whole class goes to the board, each with a different principal, finding the interest for 2 months, 3 months, etc., up to 11 months. The pupils then discover that since 2 months equal 60 days, the rate being 1% for 60 days must be $\frac{1}{10}$ % for 6 days or, in other words, $\frac{1}{1000}$ of the principal. The pupils again go to the board and find the interest for 6 days, and so on up to 29 days, each one using a different principal. The rule for the 6% method is then formulated by the class and applied in a number of problems and the interest is found at other rates by both the general and 6% method, the pupils being led to decide for themselves by actual comparison when it is easier to use one method and when the other. The use of interest tables at the bank is explained and the pupils are required to make a small interest table and use it in computing interest.

We are now ready to open our school bank of deposit and to show its variety of uses. Each pupil provides himself with an envelope of blank business forms, a quantity of toy paper money, a bank book, a check book, and a blank account book. The class resolves itself into a number of business firms. At first every one goes into the grocery business and each establishment consists of one pupil. The keeping of a simple account is taught and practice is given in making out deposit slips. Each pupil then presents his bank book, deposit slip, and paper money at the bank for deposit, and the appointed pupil-bookkeepers enter deposits at the bank and return the bank books to the depositors. Business transactions of an imaginary character now begin, and

the boys and girls are taught the proper filling out of the blank checks and how to cash them at the bank, payments from one pupil to another being made by check for the sake of practice. Every transaction is entered in the account book and also in the check book, and no check is accepted at the bank until approved by the teacher, to prevent carelessness. At this stage the pupils begin to discover the practical benefit of combination as an aid in auditing accounts, as well as in other ways, and requests are made to join forces in some way. Corporations and partnerships are studied and are duly organized from the class. Individual tastes begin to crop out and we have firms of lawyers, dealers in real estate, artists, carpenters, wall paper and carpet designers, booksellers, printers, and so on. As the imaginary trade flags—boys and girls at this age caring more to produce than to use the productions of others—the need of advertising is broached. The printing firms are soon doing a brisk business in printing advertisements, for which the school bulletin board is rented at so much per space by the bulletin board committee. When trade flags again an agent is suggested and the subject of commission developed, several pupils accepting the position of commission merchants. After three or four weeks of business arithmetic in this form, a thorough review is given on all the kinds of business transactions thus far developed and for the rest of the year business transactions are relegated to before and after school periods, when the bank is declared open and a lively buying and selling trade carried on. The interest the pupils take in this business gives practice enough in the making out of business papers of all kinds to insure a good practical and critical knowledge. Of course, it is necessary to change the bank tellers occasionally and to select only those who can be trusted for their accuracy.

Borrowing money on orders is next taken up in class and the approved form of note drilled upon, with the reckoning of bank discount. The practical application of this cannot be easily carried out at the school bank, because of the shortness of the school term, notes being generally supposed to run at least for 30 days. Business letters are written in class ordering goods of different kinds. A study is also made of drafts, and of money and express orders, as other modes of paying besides the check, and the advantages of each are discovered.

Frequently the class asks for a business period in place of the regular recitation in arithmetic, and when possible this is given as a reward for good work. Foreign exchange and stocks and bonds are left until the next year.

The work outlined usually takes until April. We spend the next month on mensuration problems, still keeping up our rapid drill on the four operations, five minutes daily at the commencement of each period, and letting the business practice go on in the spare time before chapel exercises in the morning and on rainy recesses or whenever a spare moment occurs.

The pupils from their preceding work recognize and name rectangles, squares, oblongs, the obtuse, acute, scalene, isosceles, and right-angled triangle. They know also the common units of measure and have had some practice in reduction and in the four operations as applied to denominate numbers. Various problems in measurements of surfaces are now worked out; the dimensions of the schoolroom floor, windows, doors, and blackboard are found by actual measurement, and the area of their surfaces determined by computation. We have found it a good exercise to let the class guess the result when the dimensions are given and compare their estimate with the true results. This leads to care in getting a reasonable result when they work out the problems of the book. The text-book, Smith's *Grammar School Arithmetic*, gives many valuable problems along this line, and the pupils study out for themselves from the book a method of finding the area of the triangle from their knowledge of the area of rectangles. They cut paper to prove that a triangle has half the area of a rectangle of the same base and altitude, and are ready for the next step, *i.e.*, the use of triangles in measuring heights of buildings, trees, etc. When ratio is not taken earlier with the review of division it is taught here together with simple proportion. After considerable drill with abstract numbers we use the practical applications in the text-book and groups of pupils are detailed to measure the height of the schoolhouse, Teachers College, and other buildings in the vicinity, by means of the right-angled triangle. This group work is given in place of the regular home lesson from the text-book, and is reported upon to the class. The report is criticised by them, the figures and a sketch being placed upon the blackboard and a clear explanation insisted upon. We

next, using paper cutting as before, study out a method of finding the area of the parallelogram, and formulate the rule for doing so. The pupils easily discover for themselves, by cutting and fitting together the cut pieces, that the parallelogram produces a rectangle of the same base and altitude, and from their previous ability to find the area of the rectangle they are now ready to apply their knowledge to the solution of text-book problems. The area of the trapezoid presents more difficulty and again paper cutting is resorted to. Sometimes the pupils are asked to experiment at home and, if the proper spirit of independence has been developed, they will resent any attempt to help them, preferring to find the truth for themselves. In this way they discover that two trapezoids form a rectangle whose altitude is the same, but whose base is the sum of the parallel sides of the trapezoid. They then formulate a rule for finding the trapezoidal area by halving the square contents of such a rectangle. Lastly we apply our several rules for finding area to problems in measuring irregular shaped lots of land which can be divided into triangles, trapezoids, and parallelograms, so that the area of each being found the sum of their areas will give the required result.

After surface measurements have been taken we consider cubic measure. The pupils fill an empty box with inch cubes and find that there are as many cubes in the first layer as the product of the number of units in the length by the number of units in the breadth, and that they need as many such layers to fill the box as there are units in its depth. From this they formulate for themselves a rule for finding the cubic contents of a rectangular solid, and apply it in the solution of the text-book problems. This work in cubic measure has, of course, already been taken in a lower grade but is re-developed here when necessary to prevent the common mistake of adding the three dimensions to find the contents. We do not as a rule take the subject of circle measurement or the contents of spheres, cones, and cylinders in this grade, although sometimes advanced pupils have been allowed to employ spare moments in working out problems of this sort.

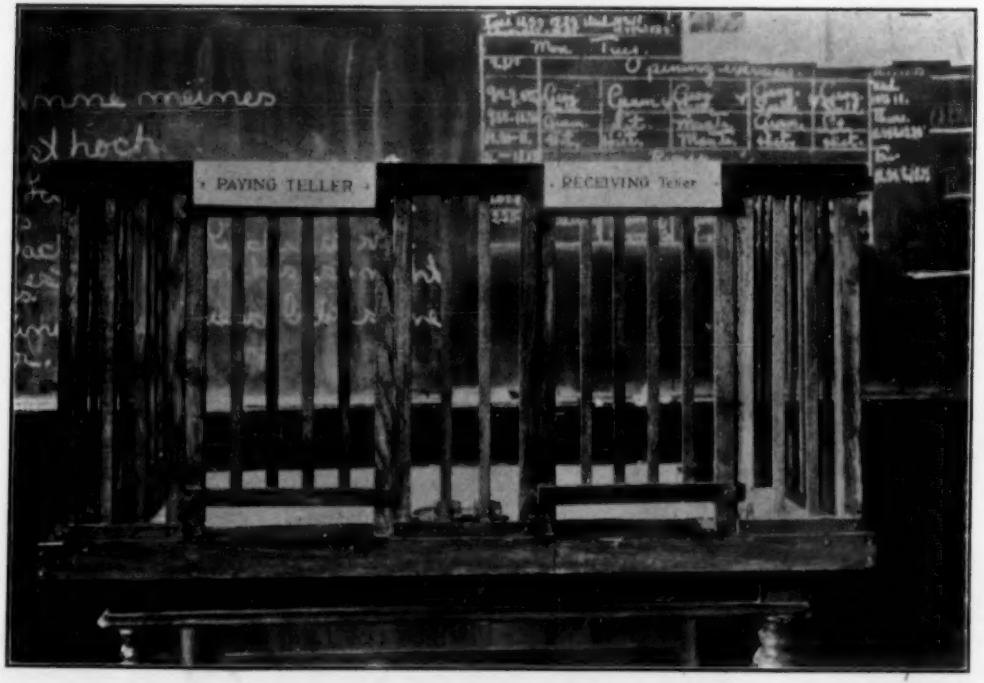
The pupils are interested in mensuration to such an extent that they often try experiments of their own at home and bring in problems like that of the Sirdar's chessboard and other puzzles.

We encourage this puzzle inventiveness as much as possible, but keep it rather for free periods and recesses than for the regular class-room work. There will always be pupils who outstrip the rest in mathematical ability and to them can be given the advanced problems in the text-book. We have already in the sixth grade taken the simple algebraic equation with the use of x. In our practical problems this use of the simple equation has been continued, and as the year's work draws to a close we give as much practice as possible in problem solution, letting each pupil go to the blackboard to solve problems from various parts of the text-book in review. The last few weeks of the term are given up to this varied review work, every member of the class holding himself ready to question any part of the problem not understood or not made clear by the one explaining. Special rapid drill in the last weeks is also given on factors and multiples, the teacher naming multiples and the pupil giving the factors, and vice versa, as a preparation for the work in algebra in the following year.

A word should be said as to the preparation for the arithmetic lessons in this grade. We have but four half-hour recitations a week, hence the pupils' preparation must be made at home. What that preparation must be is largely determined by the recitation. After the pupil finds, early in the year, that in the arithmetic lesson he is expected to defend any statement he makes, to be equipped to explain each problem he works to the satisfaction of class and teacher, to be able to answer rapidly all questions involving review work, and to perform the four processes with abstract numbers within a given time, we have little trouble with home help. Parents frequently report the scorn and derision with which their offers of help are received, and although lazy pupils sometimes rely too much on outside assistance a very healthy class spirit of independence prevails. On the other hand the teacher sometimes asks bright pupils to assist slower members of the class by questioning them, but they are warned not to do the thinking for their classmates. The daily problem work is placed in small blank books made by the pupils by doubling sheets of the ordinary arithmetic paper and fastening them together. Every other page is left blank for corrections and the pupil's first duty in preparing each lesson is to correct any examples marked wrong on the preceding pages

of the book. When the book is filled it does not become the pupil's own until all the examples have been correctly worked. The entire work is always insisted upon and if any flaw or omission in the work is noted, the example is not accepted although the final answer may be correct, this being a very effective preventive of inaccurate or untruthful work. Frequent written tests are given throughout the year, the regular recitation period being used for these.

L. E. R.



Bank Used in Arithmetic, Grade VII.

(See pages 42 and 65)

MANUAL TRAINING (Girls)

Grade VII

The questions are sometimes asked: Why should the subject of cooking be included among the seventh grade studies? Of what practical value is it to so young a girl? Ought the school hours already so crowded with necessary subjects be given to cooking, a subject which can be taught in the home when the girl is old enough to make it worth while? These questions can be answered in some such manner as this. It is true that for a seventh grade girl in the Horace Mann School there is no real necessity for a practice of her knowledge in this field at home, nevertheless it is stated as a psychological fact that this is the formative period, that is, that the girl's interests, tastes, and power of efficiency are at this time being formed. If this is true, then the foundation should be laid for an interest in and a taste for domestic matters. And while it may not be an absolute necessity for these girls to cook and perform other household processes at home, it is true that they do a great deal without that necessity and with very good success, often arriving at the point of cooking an entire meal for the family and of taking upon themselves much of the burden of cooking in the event of the departure of the cook. In answer to the argument that the girl may learn cooking in the home, facts do not bear out the truth of this statement. In the past, conditions of life were such that the girls, even in wealthy families, were trained in all branches of house-keeping and even the young children had each a share in the household duties. This is not the case at the present time with girls of the more well-to-do families. Living in hotels or apartment hotels is an absolute barrier to this, and those mothers who keep house often have too many outside interests, and are too much taken up with social duties to give their daughters opportunity for this training. The cook is an awe-inspiring person who allows no one within her domain, and so it goes on until the girl arrives at the marrying age and still retains a dense ignorance of the working of the domestic

machine. Therefore it would seem that school is the only place where the girl will receive such training.

Looking at it from an educational standpoint, in what does this subject fall below other subjects in value? It is a generally accepted standard that all subjects which do not have a vital bearing on life shall be removed from the curriculum. It must be admitted that on this basis this subject should have a prominent place. It has a rich body of subject matter of its own, dealing as it does with many phases of the food problem—the production and manufacture of food materials, their wholesomeness

Domestic Science Laboratory. Grade VII.

and digestibility, the study of the food elements and the effect of heat upon them. It introduces the pupils in a simple and interesting way to the sciences. The action of sour milk and soda upon each other, and their effect in making cake light, opens up the whole subject of acids and bases in chemistry. The rising of the cake in the oven is an illustration of the expansive force of heat. The growth of yeast in bread and the prevention of the fermentation of fruit prepares the

way for the study of bacteriology, and so on through many instances.

Domestic science is one of the best means for training the girl in the power of forming correct judgments and deductions, of seeing the relation of cause and effect, since in this subject the results are so immediate, so clearly and vividly seen. This may be shown by taking as an example a lesson on soft custard. In the cooking of the egg, the principle learned is the coagulation of the albumen at a low temperature and its hardening and toughening at a high temperature, and in the custard lesson its application is in the fact that excessive heat or prolonged cooking will produce a curdled custard. The result of the action of heat on the egg is so rapid and complete that the pupil may trace, at once, the connection between the cause and its effect.

One should not forget to mention the training this subject gives in neatness, order, foresight, practical management, and personal responsibility; and where children are working together so closely and actively, thoughtfulness and helpfulness are necessarily developed.

The work in cooking in the seventh grade is limited to one lesson a week of one hour and a quarter in length. The aim of the course is to give an elementary knowledge of the effect of heat on food elements; of the various typical cooking processes; and also to give training in manipulation.

Children of this age not only crave but need much physical activity. Their natural interest is on the doing side, to make things, and this being the habit-forming period, is the time to teach proper manipulation and the use of tools. At the same time, they are sufficiently advanced to be eager to find out the reasons for things. Hence the course attempts to combine practical work in cooking and cleaning with discussion of theory, in such proportions as to make the work intelligent and alive, as well as desirable and interesting to the pupils. The general proportion of discussion and practical work in each lesson is about one to three, with an occasional lesson devoted to simple chemical and physical experiments.

A list of lessons follows.

1. Baked apples and dish-washing lessons
2. Apple sauce
3. Cooking cereal

4. Review cereal, moulded with fruit
5. Corn starch pudding
6. Experiments on starch
7. Study of egg. Scrambled egg
8. Soft custard
9. Chops
10. Beef tea
11. Creamed potatoes
12. Cream soups
13. Candy lesson (holiday time)
14. Popovers
15. Sour milk griddle-cakes
16. Muffins
17. Ginger bread
18. Baking powder biscuit
19. Light omelet
20. Sponge cake
21. Baked fish
22. Waldorf salad
23. Lemon jelly
24. Orange charlotte
25. Experiments on yeast
26. Bread
27. Rolls
28. Canned pineapple
29. Strawberry jam
30. Chocolate, sandwiches
31. Strawberry shortcake
32. Review
33. Ice cream party

The first two lessons are selected because of their simplicity, and because they give opportunity to introduce the idea of the changes effected on food by cooking and to teach the subjects of dish-washing, care of room, etc. The next four lessons take up the subject of starch in various forms, reserving experiments until the last. This method proves more satisfactory with these children at this time, as their interest is more keen in finding a reason for a thing after they are familiar with the material. Then follow four lessons showing the effect of heat on proteid

foods; then two more on starch. Then follow five lessons on batters and doughs which illustrate the historical development of leavening agents, omitting yeast until later. Next follow two lessons to show the beating of air into egg, its retention on adding other ingredients and its cookery under these conditions. Next comes a lesson on baked fish where the children work in groups on one large dish. After this, three constructive dishes, giving the pupils opportunity to exhibit their individual ideas in decoration, garnishing, and serving. The next five lessons illustrate the processes of fermentation: its encouragement in the case of bread and its prevention in canning and preserving. The experiments here precede the actual bread-making since the pupils have become sufficiently familiar with materials to make this a desirable method of procedure. The rest of the lessons are devoted to a review or are social in their nature. The subjects of the lessons are selected with reference to the home needs and tastes of the children and the shortness of the time given to each lesson. Those lessons which must necessarily be long, as in bread-making, are divided in such a way that two or more periods are given to what is really one uninterrupted process.

The course gives frequent opportunity for review in the recurrence of principles learned before, as in the development of sponge cake from omelet, and of cream soup from cream sauce. Also the processes of manipulation are considered with respect to their increasing difficulty from the simplest forms of stirring to the beating and cutting and folding of the whites of egg in the sponge cake.

The method of presenting the lesson attempts to conform to the standards accepted for all elementary school work. A lesson on light omelet may be taken as typical of what is done throughout the course.

The statement is made by the teacher that an omelet is to be made and various kinds of omelet are named by the pupils. This particular one is to be a light omelet or omelet soufflé. The necessary ingredients are named by the pupils from memory, since they are more or less familiar with the dish. These are placed on the board together with the amounts of each to be used. Since the method of mixing and the manipulation necessary is largely new, the process is demonstrated by the

teacher, the pupils gathered about her. This word "demonstrated" does not mean that each step is explained to the children without any of their faculties being brought into play except attention and memory. Each step is suggested by them and they are constantly questioned on their past experience, as "If I want to make the omelet very light what must be done to the egg?" "If all the air possible is to be beaten into the egg, how would you advise me to proceed?" (They have already had one lesson on separating the egg in the floating island lesson). "Which part shall I beat first?" "With which part shall I mix milk and seasoning?" "Since I have been at such pains to beat my egg full of air, what must I be careful of now in mixing the white with the yellow?" "Let us see how this can be done." The cutting and folding method of mixing is here shown, care being taken not to break the bubbles. The kinds of fat that might be used for greasing the pan are suggested by pupils, butter being used here for flavor. The temperature at which egg should be cooked is reviewed and a turning down of the gas suggested as soon as a brown crust is formed. The expansion of the air bubbles with the heat is noted and—"What will happen to the omelet when it becomes cold?" is asked, the necessity for eating an omelet immediately being readily seen. The cost of eggs is spoken of. Suggestions are then asked for as to the cooking of the egg on top without rendering the entire omelet tough. The oven is finally thought of as a means for bringing the heat over the top. Ways of serving and garnishing are asked for and the omelet is finally folded and slipped on a hot plate. A summary of the entire process is then given by one pupil with suggestions and corrections by the others, and then the most important points are picked out. The pupils then each make an omelet, which is criticised and eaten. Dishes are washed and places left in order. Since the pupils do not finish their dishes at the same time, a summary of the entire lesson at the end of the period is impossible but an attempt is made to give one at the beginning of the following lesson, the review being frequently conducted by the children themselves, asking each other questions on the lesson.

Often the finished dish is placed before the pupils at the beginning of the lesson that they may see what they are to work toward, and from this model, by tasting and examining, they

name the ingredients and often tell something of the method of mixing.

Occasionally, the pupils experiment for themselves with ingredients, as in the lemon jelly lesson. Where there are only three materials, liquid, gelatine, and sugar, to deal with, it is possible for them to find out for themselves proportions and method of putting together.

Two sets of note books are kept, one for use in the class room, in which rapid notes may be written and the recipes jotted down; another for home work, in which a complete record of work done in the school room is kept. The English and spelling in this book are corrected, and it is useful to show the teacher what the pupils learn from each lesson and is valuable for the pupils later.

A sheet of paper is kept posted on the bulletin board in the cooking-room, on which a record is kept of what dishes the pupils cook at home. This is a source of information for the teacher and encourages the pupils to do work at home.

The children work individually, almost entirely, since only in this way is a child wholly responsible for a finished piece of work. Occasionally, however, they work in groups, on a large project, as in the baked fish lesson where some make the stuffing, others the sauce, and still others clean and dress the fish; or in the ice cream lesson where some freeze the cream and others make the cake.

L. B. W.

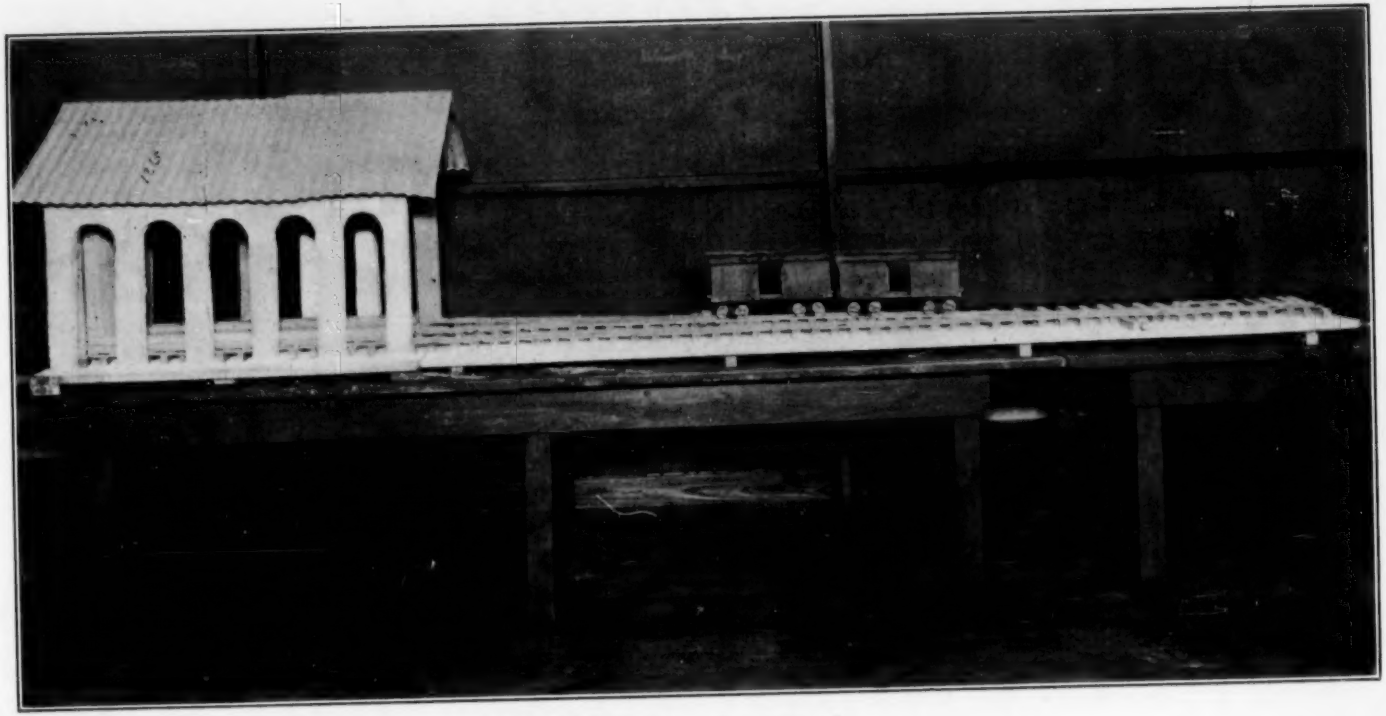
MANUAL TRAINING (Boys)

GRADE VII

Modern Transportation is the industrial study dealt with in the seventh grade, and it is treated much in the same way as is the factory in the sixth grade. The railroad is the main topic, and is considered from the standpoint of construction, operation, and social importance. The work is organized largely on a co-operative or group basis, and gives a fine stimulus for the exercise of initiative and executive ability.

During the past year the class made a working model of a freight equipment. A freight house was constructed, tracks and switches were laid, platforms put in, and cars built. Two sections, one of twenty boys and the other of twenty-four, worked on the project. The first item taken up was the freight depot. The boys described different types of freight houses and railroad depots that they had observed, and discussed the suitableness of various building materials. Concrete was suggested, and the problem of building a model freight house of this material was discussed. The boys knew that the concrete needed some sort of a mould to "set" in, for they had watched the construction of concrete buildings in the neighborhood, and they were able to describe the process. It was decided to make the mould of boards, ram the concrete into it, and then remove the boards after the cement had hardened.

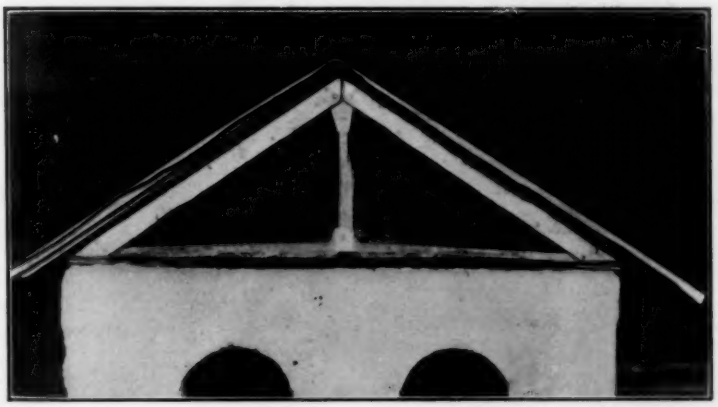
The form of building was discussed, blackboard sketches were made from suggestions, and a plan was decided on that would accommodate three tracks and two platforms, the walls to have high arches for light and for convenience in handling freight. To form the arches in the mould, it was proposed to use solid blocks of wood the thickness of the wall, and the width of the arch, rounded on one end. A drawing of a plan and elevation was put on the blackboard, a suitable base made of boards was arranged on saw horses, and groups were assigned to the different parts of the work. One group rounded the arch block, another



Freight Equipment. (See page 57).

laid out the wall lines on the base with chalk and line, another sawed out and nailed the boards for the mould, and another constructed the platforms. When the mould was ready, stiffening rods were wired in as was suggested by illustrations of concrete construction in a trade journal. The concrete was mixed (one part of cement, three of sand, and five of stone) and rammed into the mould. The next day the boards and arch blocks were taken out and the walls of the freight house were ready.

The roof of the depot was quite an important feature of the project. Iron construction was decided on. Experiments and demonstrations were made to show the importance of the shape of a beam in adapting it to its function in a structure. A straight strip of sheet iron was supported edgewise from its ends, and a weight was hung from the center. It was found that the strip doubled or "buckled" over sideways. A bend or crease lengthwise in a strip to make an "L" cross section showed greater

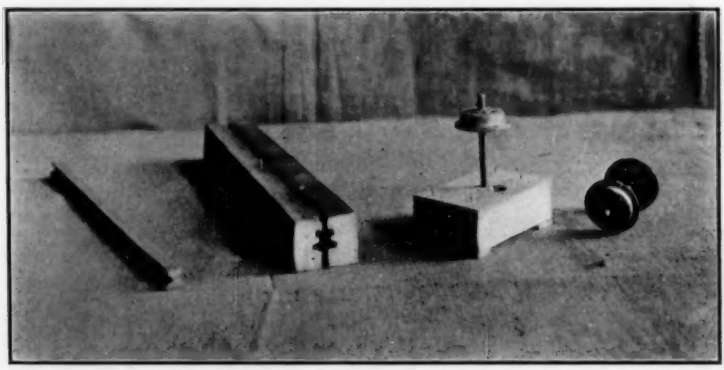


Roof Truss.

capacity in supporting a weight, and a "channel iron" proved better still. A double channel or "I" beam was accepted as the best form for the roof trusses. Builders hand books with illustrations of steel trusses were shown to suggest a suitable type of truss, and the names of the parts were pointed out. Demonstrations were made to show the function of the different parts of a truss, and the distinction between a compression member and a tension member. One boy was elected as drafts-

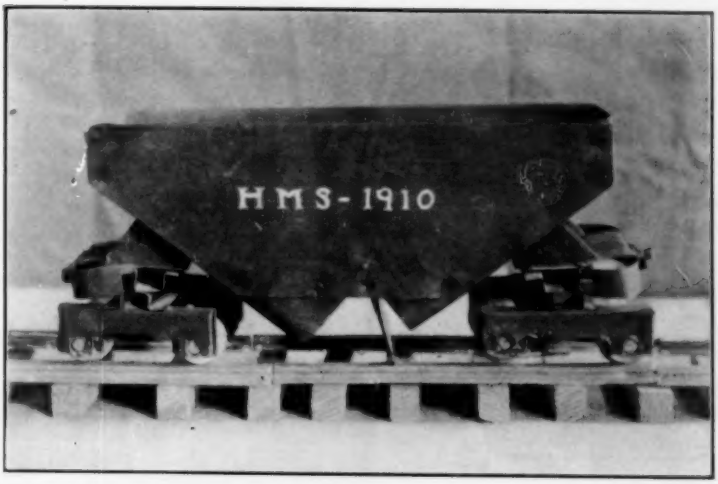
man to draw in detail the roof truss from which the others could work. The class was divided into groups, one to bend the channel beams, one to rivet them, one to make the tie rods and plates, and one to assemble the parts into complete trusses. When these trusses were finished they were placed on the building, and a roof of corrugated iron put on.

The track was the next important part taken up. The idea of running a railroad through a new section of country was suggested, and the class was asked to consider what would have to be done first. The purpose of surveys, right of way, and percentages of grade were discussed, and the laying out of curves was explained. Some of the boys had seen rolling mills in

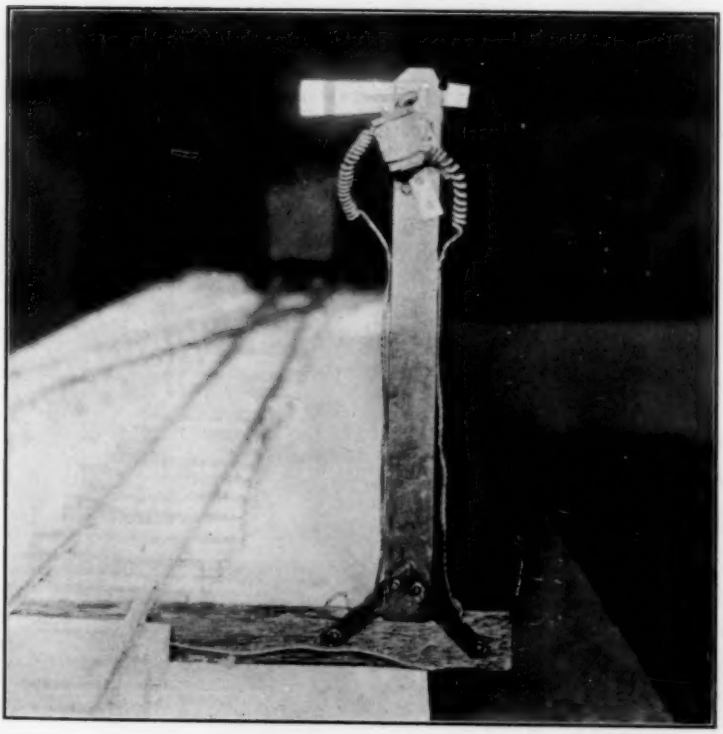


Rail, Moulds, and Wheels.

operation, and described how the rails were rolled out. Sketches of the rollers were made on the blackboard, and the boys were given the problem of how and of what material they could make their rails. They could work out no way of rolling a metal, but suggested that the rails be cast of lead in moulds, as a substitute. How to make these moulds was the next problem. Sand, plaster, putty, and wood, were suggested as materials. Wood was chosen, because a groove could be planed in two pieces which then could be put together. Much time and thought was given to finding a way to make the mould perfectly smooth and proof against burning. Graphite was suggested, tried, and found very satisfactory. Each boy made a mould, cast some pieces of track, and when they were finished laid them in place. A roadbed with wooden ties was prepared



Coal Cars.



Signal.

while the casting was going on. One boy was elected as draftsman to draw the details of the curves and switches. From this drawing, the lines of the entire track system were laid out on the base by one squad, another placed and fastened the ties, and the roadbed was ready for the rails. The switches and signals were given to a special group. The tracks were first laid in the freight house, then the curves and switches outside, and lastly the signals were put in.

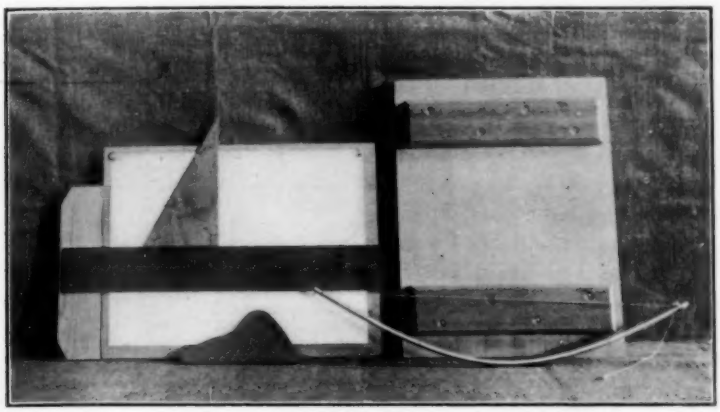
A car-building squad for the purpose of making axles, casting wheels, riveting trucks, and building the bodies was formed of boys who had completed their track work. As each part was taken up, the mechanical problems were discussed by the entire class. One typical problem was the casting of wheels on the axles. It was proposed that wood moulds be made, and as the shape was circular that bits be used to bore out the holes. Three sizes of bits were used, first a large one, $1\frac{1}{4}''$, bored $\frac{1}{8}''$ deep for the flange, then a $1''$, bored $\frac{3}{8}''$ deeper in the same center for the tread, and last a $\frac{1}{4}''$ bored through for the axle to be inserted. A cover was made with a $\frac{1}{4}''$ hole for the axle and a vent and a gate hole. This cover was split through the center of the $\frac{1}{4}''$ hole so that it could be removed after casting the two wheels on an axle. The mould was graphited, and the axles were notched with a file where the wheels were to be located. All of this process was worked out as a class problem with experiment and discussion. The wheels were trued up on a turning lathe, and the questions of differential and bevel of the tread were explained.

Signals were designed by individual boys. Those who were interested in the subject made drawings of proposed systems as part of their home work. Various ideas were suggested, submitted to the class, and the most practical one, an electric semaphore, was selected. The designer made the magnet, the signal, and wired the track himself.

These large group projects are usually taken up in this grade after some strictly individual work has been done. It is difficult to hold to high standards of technique when a variety of operations are being carried on at one time, but, if some individual work precedes the group work, there is opportunity for the teacher to establish the desired standards, and also to gain a knowledge of the ability of the individual boys.

During the present year a study of boat construction pre-

ceded that of the railroad, and drawing boards, "T" squares and triangles with which to draw the boat plans were first made. In making the drawing board special emphasis was put on the necessity of having a true level surface and straight



Drawing Set.

edges. The "T" square was accurately produced by using a "shoot board" to plane the edges of the head and blade. The idea of using a shoot board was suggested by the class after a discussion of various devices proposed by the boys. The necessity of accuracy in these tools was the idea emphasized, and the thought of the class was concentrated on methods to secure such a result. In making the triangle, another device was worked out by the boys to get the 60°–30° angles true and the edges straight.

The boys might have purchased their outfits, and proceeded at once to the boat designing, but here were valuable opportunities that could not be thrown away for introducing several tool processes and a number of geometric ideas, and for developing in the boys' minds a better idea of the meaning of accuracy.

In drawing the individual boats, the boys used designs published in periodicals devoted to the subject. These printed designs were used only as suggestions, and were modified according to the boy's judgment to accommodate a dry battery and small motor for motive power. As to displacement, balance, finding the water line, center of resistance, much was learned

as the construction progressed, but most from experimenting with the boats after they were built. The form of construction adopted was the "bread and butter" plan, and the lines of the joints between the layers were used as construction lines in drawing the sections of the boat. After the design was drawn, paper templets of each section were cut out, the board sections or layers were sawn out, and the sections laid up, glued, and nailed. A propeller was cast in lead directly on a shaft. This shaft was run in a small tube that was inserted tightly in the stern, and pitched so that the upper end was above the water line. The motor shaft was geared with a clock wheel and trundle to the propeller shaft.

Considering the whole subject of transportation from merely a hand-training point of view, the processes worked out are more varied than those found in the usual set course of useful models given to the seventh grade, and the number of materials used is greater but, far more important than this, is the superior fund of ideas that this work introduces. A serious study is made of one of the greatest agencies of modern civilization, and this constructive study gives the boy an intelligent interest in it that could not be attained by reading or observation. The boys' interest in these subjects at the age of an average seventh grade pupil is keen. He dislikes to have the period for shopwork close and begs for permission to work overtime. Besides the variety in materials and processes, and the rich field of facts, there is the opportunity and incentive for individual initiative and ingenuity. The group work, when organized on a basis typical of the constructive industries, affords opportunities for placing responsibilities on the boy, and compels him to stand on his own feet.

As a subject related to previous work, and to that scheduled for the next higher grade, transportation has a very fitting significance. The sixth grade deals with the factory, the seventh with transportation, and the eighth grade, or first year high school, takes up communication, including printing, typesetting, etching, engraving and, if time allows, the telephone and telegraph. This arrangement permits the study during these three years of some fundamental aspects of modern industry, and opens to the pupil a broad field of manual and intellectual experience.

Additional Projects.

In addition to the regular work, classroom and school needs occasionally arise that suggest suitable projects for the boys to work out after school hours, or during study periods. If a group

Hymn Board.

of boys are interested in making something to be used in their classroom, and the project is worth their while, they are given opportunity to work on it.

Shelves for books and flowers, bulletin boards, and benches form part of a list of additional projects that have been undertaken. The hymn board used in the morning exercises was planned and made by a small group in the seventh grade. The bank used in connection with seventh grade arithmetic was built by one section of that grade. It was taken up as a class project, each boy submitting his idea for the bank in a drawing.

Groups of from four to ten boys sawed out the stock from boards, dressed the pieces to the dimensions on the drawing, and assembled them. The "bank" was then stained and varnished. Time to do this work was found during study periods and after school hours.

E. G. McN.

ART

GRADES VI AND VII

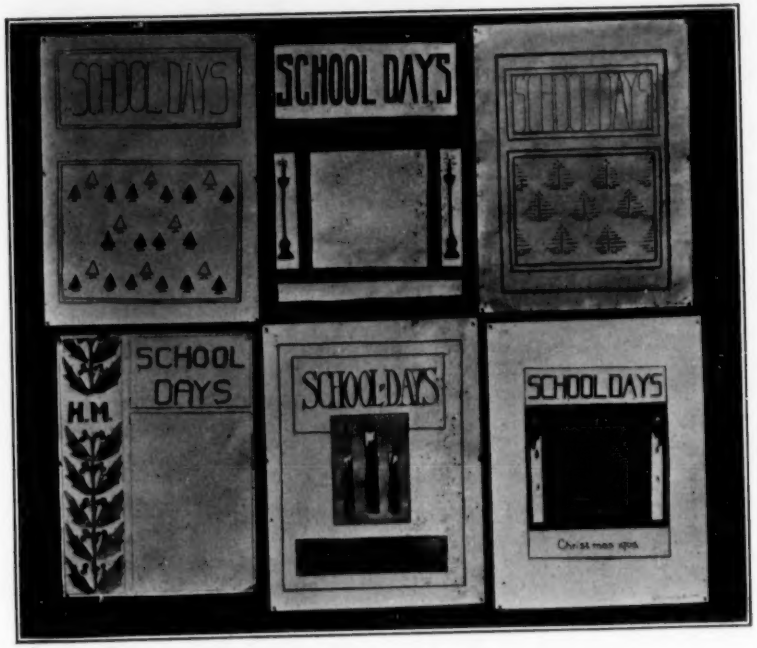
Since the articles published in the previous numbers of the TEACHERS COLLEGE RECORD have fully explained the aim of the art course and the method of presentation, it is not deemed necessary here to enter into detail concerning those phases of the work.

The structural elements, spacing, massing, and coloring, form the basis for choice of subjects in all the grades. Experience in the creative use of these elements cultivates good judgment and ability to express ideas in art form. A growing appreciation of harmony in form and color develops power to draw and to design. We find that pupils in the seventh grade show less interest in merely representing and more in designing in line, mass, and color.

The plan in general for the sixth and seventh grades is as follows:

1. The statement of a principle, its illustration in design and expression.
2. Exercises in the use of the principle in creating harmony.
3. Application of these exercises in design, handwork, pictorial work, or in drawing from nature.

For example, the seventh grade this year after two months' work criticised their own productions (designs for the cover to be used on the Christmas number of *School Days*) because they lacked strong dark and light massing. Fine examples of dark and light massing were found in photograhpic reproductions of Venetian pavements. From a number of enlarged drawings each child made his own choice and copied, keeping in mind that his aim was to reproduce the same proportion of dark and light. This was followed by original designs in dark and light. The children in these grades, especially in the seventh, are able to feel the lack of harmony in their work, and wish to know what the masters of art have to say on the question, therefore they are taken to the world's masterpieces to learn. The



Designs for Christmas Number of *School Days*.

(See page 71)

appreciation of a certain art principle as embodied in the creation of a master, forms the standard of criticism for that child and makes clear the aim of all future work using that principle.

Care must be taken in criticising the work of these grades that we do not err by placing undue emphasis on the execution and thus lose sight of the aim of the art course which is appreciation. As Ruskin says—"Always look for invention first, and after that for such execution as will help the invention. Above all, demand no refinement of execution where there is no thought, for that is slaves' work unredeemed. The demand for perfection is always a sign of a misunderstanding of the ends of art."

The following subjects are used as exercises in developing harmonies of line, mass, and color. No attempt is here made to give them in their logical order. The order in which they are given varies according to the ability of the pupils and the other subjects of the curriculum.

Grade VI

I. Art during the Middle Ages.
   1. Shields.
      (a) Strong ink lines.
      (b) Strong color.
      (c) History of development of forms and designs.
      (d) Talk by the teacher.
   2. Old castles.
      (a) Pencil sketching.
      (b) Appreciation of mediæval architecture
          Study of illustrations by Jules Guerin.
   3. Books and manuscripts.
      (a) Wood-block printing.
      (b) Illuminating.
      (c) Life of Wm. Morris.
          Venetian printers.
   4. Stained-glass windows.
      (a) Subjects—shields, flowers, castles, and knights.
      (b) Color harmony.
   5. Sculpture—Talk by teacher.
      (a) Giotto's Tower.

(b) Figures in panels of Amiens Cathedral.

6. Pavements.

For study of dark and light designs in a square.

II. Subjects suggested by colonial history.

1. Dutch wind-mill as motive in a design.
2. Plates in blue and white.
3. Pose—Puritan costume.

III. Still-life groups.

Elements influencing choice of objects, and arrangement.

(a) Variety in shape and size.
(b) Light and dark.
(c) Harmony of color.

IV. Book covers.

1. Spacing a rectangle.
2. Design for borders.
3. Color.

V. Flowers and fruits.

1. Drawing.
2. Massing.
3. Color.

GRADE VII

I. American illustrators of to-day—Howard Pyle, Elizabeth Shippen Green, Jessie Wilcox Smith, Edwin Abbey.

1. Color schemes made from a study of magazine illustrations. For example, one exercise might be to make a color scheme of one light and two dark colors, or three values of the same hue as they are found grouped in "The Pirate" by Howard Pyle. This color scheme is later applied to an original design in either landscape or pose drawing.
2. Copying drawings of animals and figures to study characteristic lines, dark and light massing, and harmonious colors. The drawings of animals by Nicholson, Bull, or Parks are suitable for this work.

II. Book covers.
Design for Christmas number of *School Days*.
(See page 68)
(a) Spacing a rectangle.
(b) Practice in drawing strong ink lines.
(c) Lettering.
(d) Dark and light massing of the design.
(e) Application of a selected color scheme.

III. Still-life group, chosen to illustrate hue, intensity, and dark and light of color. This work is preceded by a critical study of Japanese color prints.

IV. Nature and pose drawing.
As exercises in line, mass, and color.

E. M.

MUSIC

Grades VI and VII

The time set apart for music in the sixth and seventh grades is given up at present almost entirely to chorus drill. In both years the aims of the chorus singing are to keep up a lively interest in the work, to gain accuracy and prompt response to signals, and to further develop the love and appreciation of good music. The learning of notation and drills in reading required of the boys and girls in the earlier grades now find their direct application in the singing of good songs and enable us to give point and variety to this later work. Appreciation demands both analytic power and imaginative response. Just as in English studies the upper grade pupils learn something of the principles of grammar and composition in order that they may read with greater pleasure more difficult and varied literature, so the knowledge of musical terms and the perception of musical forms enable us here to understand and to sing songs of many kinds. Some of these contain the words of familiar poems, such as Heinrich Heine's "The Loreley," Longfellow's "Ship of State," and Burns's "O, Wert Thou in the Cauld Blast." Some, like "The Star Spangled Banner," "Men of Harlech," and "Forth to the Battle," are patriotic or heroic; others, like "A Capital Ship," and "All Through the Night" are humorous or pathetic. Many are simple folk songs, such as "Auld Lang Syne" and "The Auld Folks at Home." Each song as it is learned is carefully analyzed as to the thought in order that the singing may be intelligent and sincere.

At the beginning of the year each voice is tested and the pupil assigned to the part better suited to the quality or range of his voice. The habit of singing only one part is, however, likely to deprive the pupil of readiness in carrying any part independently; it may also limit his range and fail to give the necessary ear-training. To offset these difficulties we sometimes change the parts about, letting the sopranos try the second, and the altos the first. For the purpose of developing a clear, well-

sustained tone we introduce the chorus period with short vocal drills, such as the *doh*, *me*, *soh*, *doh* arpeggio, and the octave skip, beginning in either exercise on various pitches and using the syllable names and different vowels. The chord work begun in the fifth year is used as a vocal and ear-training drill, and each voice is given practice in singing the low, middle, and high tones in the chords.

By means of steady practice in work of this kind we expect our pupils, at the end of the sixth year, to read and carry the first or second part in songs and canons, to produce a clear, free tone, to enunciate distinctly, and to sing their songs with understanding and imagination. The seventh year chorus, because of longer practice and experience, can sing more difficult songs and read in one, two, and three parts. After continued drill in analyzing the structure of their songs, they are able to notice at a glance repeated and slightly modified phrases. This greater ease in the reading of music, together with spirited imaginative rendering of the words, will result, we hope, not only in good singing but also in genuine love of music.

H. L.

PHYSICAL EDUCATION

IN THE SIXTH AND SEVENTH GRADES OF THE HORACE MANN SCHOOL

The health and physical development of the child are prominent factors in the educational system of the Horace Mann School. Physical education has attained a dignity equal to that of any of the traditional studies of a school, and has its place in the regular curriculum, forming a part of the schedule of each child.

At the beginning of the school year, each pupil is measured and examined, abnormal conditions and tendencies are carefully noted by the school physicians, and reports of such conditions are sent to parents with suggestions regarding further medical attention if such seems advisable. Reports of health conditions are also sent to teachers which enable them to provide for better adjustment of school work to the individual needs of the pupil. Such information is especially important for the instructors in physical education, who are thus better able to guard pupils against injuries from overwork or strains from excessive exercise.

The work for the sixth and seventh grades is planned throughout with a definite regard to the environment in which the children live in our large city, and to the individual needs of the pupils; the children are not made to conform to a system of physical training which has been devised without a real and definite knowledge of their needs.

The gymnasium period is distinctly not a period of uncontrollable play and haphazard work, with the one aim in view of giving to the child complete relaxation from the routine of the classroom, and which, at the end, finds the pupil demoralized and out of sympathy with all restraint. On the contrary, the work is thoroughly planned, there is a definite aim in view for each period, and the same good order and deportment are observed on the gymnasium floor as in the classroom, and the same application and attention to the work are required. While the gymnasium work is arranged so as to allow for relaxation and recreation, yet there is such a balancing and proportioning

of formal and recreative exercises that the class returns refreshed physically and mentally, and better able to take up the routine occupations of the classroom.

The aim of the work for each period is three-fold: educative, recreative, and hygienic. While these three aspects of physical education overlap, and are often attained by the same means, yet they are sufficiently distinct so that the work is planned with these different results in mind.

The educational end is kept constantly in the foreground not only in the formal work, but also in the games. That training is invaluable to the child which comes from the prompt, precise, and unquestioned response to all commands, from the performance of each exercise correctly, and in unison and harmony with the action of the class, thus subordinating self to the whole. In addition to this the child gains a peculiar and important training from learning to control his actions, to think quickly and accurately in a sharply contested game, in which the least error on his part may result in the loss of the game and the consequent disapproval of team mates. As has already been indicated, the recreative side of the work is much emphasized; attention is directed to those pupils who have never had the opportunity for play that is demanded for their best development, and they are urged, encouraged, and often required even to take part in the games of the class period. Not alone by games is this demand for recreation supplied, but each pupil is made to feel a responsibility for and a pleasure in the precision, spirit, and finish with which the exercises are done. This pride in the class work, gymnastic contests between the sixth and seventh grades, and the occasional selection of the boy who does an exercise best, all keep up the interest in the work and make it a pleasure rather than an exercise which is to be avoided when possible.

The more tangible organic benefits of the gymnastic lessons are sought in effects which may be considered as hygienic, corrective, and developmental. While the same exercise may and often does accomplish all of these results, yet this is not necessarily true, so in the arrangement of exercises movements are selected with reference to each of these three results.

First of all the work aims to secure, maintain, and establish the health of the children, and at the same time to insure a

constant and steady development of the groups of large muscles, and the strengthening of the vital organs, and also to promote skill in motor expression and co-ordination of the various groups of muscles.

Much stress is laid upon the corrective side of the work. While this is largely accomplished by the performance of each movement in the best possible form, other exercises are added which will correct faulty posture, tendency to round shoulders, and aid a symmetrical development.

In addition to the gymnastic work, all the pupils in these grades have the privilege of receiving instruction in swimming under the direction of a skilled teacher. Most of the pupils learn to swim and dive, many becoming expert in some of the simpler strokes.

In the fifth, sixth, and seventh grades the boys and girls are separated for gymnastic instruction, as it is important to provide appropriate and different types of exercise for each sex.

The time of the boy's class period is generally utilized as follows: The first few minutes are given up to facings, marching, and simple class formations; then calisthenics and free exercises are given for about fifteen minutes, after which the class does apparatus work for some seven minutes,—a simple vault on the buck or a high jump or a hanging or climbing exercise. The remainder of the thirty minute period is taken up with games.

The character of the exercise is entirely changed during the spring months, when the classes are taken to the playground. The work then is largely athletic, and is participated in by all of the boys. The purpose of this work is not to develop athletes as such, but to give the boys the training which can only come from athletic exercise and games.

The regular prescribed work for the fifth and sixth grades consists of two thirty minute periods for gymnastic exercise and one thirty-minute period for swimming each week. During the year contests are occasionally held between the two grades, the one in the spring being in the nature of a track meet. These contests stimulate interest in the class work, and at the same time offer an opportunity to judge the ability and progress of the individual boys.

A brief outline of the work is given below:—

Free exercises.

1. Marching and simple class formations.

2. Various combinations of body, arm, and leg movements arranged to secure a gradual progression by the introduction of more complex movements from day to day, designed to correct faulty postures and strengthen the activity of the vital organs.

Apparatus.

1. Hand apparatus.
   (a) Wooden dumb-bells.
   (b) Medicine balls.
2. Heavy apparatus.
   (a) High jumping from floor, from springboard.
   (b) Horizontal ladders.
      (1) Hanging exercises with arm flexion.
      (2) Hanging exercises with travelling forward and backward.
   (c) Stall bars.
      Hanging exercises with knee flexions and leg extensions.
   (d) Ropes.
      Climbing.
   (e) Buck and horse.
      Simple vaults with and without springboard.

In all apparatus work attention is directed to the form in which each exercise is executed.

Games.

1. Basket Ball
2. Games with Medicine Balls
3. Relay races
4. Obstacle races
5. Follow the leader
6. Indian club races.

In addition to the work as outlined above, each boy is given the option of attending, and is urged to be present at, two after-school classes each week. In these classes, which are largely attended, no formal class exercises are attempted, but the work, which is more recreative in form than the regular class work, is carefully watched and directed. The time is devoted to such games as the boys may select, and to apparatus work in jumping and vaulting, the choice being left very largely to them.

Basket ball is the favorite winter game, while baseball and track work are the most popular for the spring months. A series of basket ball and baseball games are played between the teams representing the different grades. The rivalry between these teams is very keen and a place on any one of them is regarded

as a position of honor, and is eagerly sought. A limited number of games between an all elementary team and teams representing other schools are played.

The aim of these games and contests is to accustom the boys to work together. They give to each child complete relaxation from all class routine, and yet demand of each a harmonious subordination of his activity to the activity of the other members of his team, such as he must do if he is to realize the greatest pleasure and good.

In the free exercises as well as in the games the child is urged to merge his own individuality into the individuality of the class, and to work in true co-ordination with the other members to bring about a harmonious whole. This working and playing as a part of a whole rather than as a separate individual is of great value in developing the social side of the child's consciousness.

The same amount of time in the school program is devoted to the physical education of girls and boys, but separate classes are provided for them from the time in the fifth grade when some of the girls enter the period of rapid growth preceding adolescence.

In the sixth and seventh grades, the successful adaptation of exercises to the needs of girls requires more care and discrimination than for boys. Many of the girls in these grades are increasing in height and weight very rapidly, and many individual as well as general problems for adjustment are presented by the variations which present themselves. At no time in school life is regular systematic exercise more important, and its appropriate selection and adaptation more difficult. The heart is often temporarily outgrown by the rest of the body at this time, and careful limitations of exercises of strength, speed, and endurance are necessary for many pupils. While the regular work of the gymnasium is conducted in classes, it is modified as seems necessary to meet the needs of the individual pupils. The forms of exercise for the girls include marching, free gymnastics, exercises with apparatus, dancing, swimming, and games.

Enough marching is given to provide drill in concentrated movement and in the details of correct carriage, and alert, well controlled action. The free gymnastics furnish opportunity

for exercises to correct tendencies to faulty posture and to improve voluntary control of definite bodily movements.

The girls are taught lighter forms of apparatus gymnastics suitable to their strength and needs. These increase the variety of exercises and improve the command of actions involving the weight of the body in relation to various objects, bringing gradually a self-control valuable for the meeting of various forms of emergency.

Dancing for girls of this age has a pronounced value. The term is not used here in reference to the dance of the stage nor to the conventional dance of society, but rather to the wealth of interesting material in the folk and national dances, with their historical significance and the wide opportunity afforded through them for training in grace and beauty of movement. No form of activity in the past has been more universal or more valuable than the dance for the artistic expression of the range of human feelings in the life of many peoples, while at the same time providing recreation and wholesome exercise. No form of motor activity has greater possibilities for the youth of to-day, and for girls particularly, than dancing if the varied educational values are recognized and the different forms of the dance are successfully adapted to the pupils according to age, season, and conscious interests.

Swimming is recognized as a very beneficial exercise and training for girls, and generous place is provided for this in the gymnastic programs.

A definite place is also made for games without allowing them to monopolize too much time or strength. It is recognized that certain social and moral qualities desirable for girls or boys can be better cultivated by games than by any other form of exercise. While the same qualities in general are sought in the games for all pupils, it is recognized that considerable differentiation is necessary in games suitable for girls as distinguished from boys, not only in the games selected, but also in the rules governing them.

The end desired in all the physical education instruction is the improvement of the girls' efficiency for present and future usefulness.

FRENCH

Grade VII

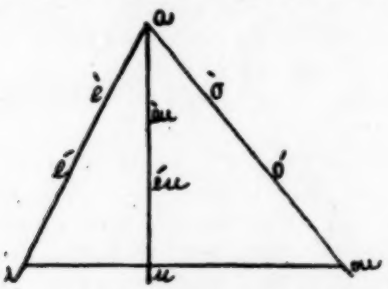
The study of the French language offers to American students, in the articulation of the foreign sounds, difficulties which may be mastered the more easily if the child takes up the study of French while the organs of speech are still adaptable and pliable.

In the Horace Mann School the study of French is introduced in the seventh grade and is continued throughout the high school, thus forming a six years' course. In the first year the pupils have four lessons per week of thirty minutes each, in the following years they have three lessons per week of forty minutes each. The short time allowed each week to French is balanced by the number of years given to the course, and the pupils who pursue the entire course should have a fair knowledge of spoken and written French. The first year lays the basis of the whole edifice—the training of the ear, a good pronunciation, the practice of the simpler forms of conversation, and the first principles of spelling and grammar.

The training of the ear and of the vocal organs is all important at the start. It is for this reason that the instruction is given without a book for the first three or four weeks, the blackboard advantageously taking the place of a text book. At the beginning reading offers two dangers: first, the child forms the habit of depending more on his eyes than on his ears to memorize a sentence, which leads to the remark too often justified, "I can't pronounce it, but I know how to spell it." Secondly, the pupil, as he reads, attacks each syllable of the word separately. In oral work the syllable is not detached from the rest of the word, the word itself is not detached from the sentence which remains a whole. To memorize a spoken sentence is the step towards this ideal—the expression of thought directly in French without the preliminary translation from English into French. Later when the form of the spoken word is thoroughly familiar to the pupil, a few minutes are sufficient for him to master the written form.

From the age of eleven to thirteen the faculty of imitation is very active, and exercises for the pronunciation of the sounds take place simultaneously with the training of the ear. The difference in sound between the English and the French vowels is illustrated, and the French vowels practised. For this the following diagram is found useful:

These sounds are practised with the teacher individually or in groups in the following order: At first a è é i, then a ò ó ou,



then i, u ou, at last a èu éu u. This diagram helps to fix the sounds in the memory. The pupils are referred to it later each time they mispronounce a vowel sound. Phonetic signs are not used.

Pupils of this age generally have no trouble in imitating a sound after the teacher. In case they do have difficulty, the teacher explains the position of the tongue and lips, and the use of the breath. For the vowel *u*, for instance, the pupil places his tongue and teeth as for an *i*, then protrudes the lips as for whistling. This gives the sound of *u* perfectly. For the nasal sounds, when the child clearly understands that the vowel sound alone is given, he finds no difficulty in imitating it.

The lessons are given with the help of the Hölzel pictures. The words used by the teacher are descriptive of objects in the picture or the classroom, the teacher pointing to each thing named. Such words are chosen as introduce the sounds to be studied. Not until the pupil can point to the objects as the teacher names them in French, thus showing that his ear is sufficiently trained, is he allowed to repeat the French word and the sounds which compose it. The words are then written on the blackboard. The examples are all given in French, no English equivalent being suggested. From the start the French

sounds are given to the letters. Later, when the pupils pronounce short sentences, their attention is called to the "liaison" and to the different aspects of a word beginning with a vowel: *une abeille, l'abeille, cette abeille.*

The pupil is soon able to understand a number of short sentences—he translates these into English, or points to the objects named by the teacher. He then learns to repeat these sentences and finally he uses them in answer to questions. At first the questions suggest the answers: *Est-ce-que l'abeille vole? Oui l'abeille vole. Est-ce que l'abeille est un insecte? Oui l'abeille est un insecte.* Then more difficult forms are used: *Qu 'est-ce que l'abeille fait?* Elle vole. Nommez un insecte. L'abeille.

For each addition to his vocabulary the pupil passes through these three phases: 1st, training of the ear; 2nd, repetition of the French sentence or words; 3d, utilization of the material thus acquired in questions and answers. For example, the teacher shows the picture and pronounces these sentences: *La mère travaille dans le jardin et les enfants jouent devant la maison.* The pupils, already familiar with the words *mère, enfants, jardin, maison,* need but little help to translate this sentence correctly. If it is necessary the teacher translates the words *travaille* and *jouent.* Then the order of the words is transposed and other words introduced. *Les enfants travaillent dans la maison. Les élèves jouent devant l'école. La mère et les enfants jouent,* etc. When the ear of the pupil is sufficiently trained, he repeats the words separately or in groups with the teacher. Then come the questions: *Est-ce que la mère travaille dans le jardin. Qui est-ce que travaille dans le jardin? Où est-ce que la mère travaille?* The new sounds are also written on the blackboard.

The vocabulary is increased very slowly, the repetition of the same words, of the same sentence and question forms, is necessary so that the answers may come readily without translation. The forms *est-ce que, qui est-ce que, qu' est-ce que, où, y a-t-il* are sufficient to form almost all the questions on the first picture. In all this early work, absolute accuracy is required in the translation as well as in the answers given. The pupil is not allowed to translate *un chien* by "the dog" because the general sense of the sentence allows such a substitution.

Up to this time no book is used and all the material acquired

has been based on the first Hölzel picture. This preparatory work takes from four to six weeks. The book used in the first year is the first part of the *Leçons de Français* by S. Alge and W. Shipmann. St. Gall, librairie Feir. This work is in two volumes. The first part is based on the Hölzel pictures. The four pictures reduced in size are in each volume, but for the 'ensemble' drill in classes of twenty-five to thirty-five pupils, the large edition of these pictures to hang on the wall, is very useful. From the first pages the pupil finds himself in familiar surroundings. He meets only words that he knows, and has little trouble to master their written form. With a little practice he will read them fluently, without spelling syllable after syllable. If he forgets the pronunciation of a word, he is referred to the vowel diagram or to a more familiar word. If it is before the word *moulin* that he stops, he is referred to the word *jardin* of the first page; if it is the word *frère* he returns to *père*, *mère*, or the triangle a è é i. The new is thus always grafted to the old which the pupil has already mastered.

In this first year there is no sight reading, the test being prepared in class orally in advance. Before using the book certain elements of grammar are presented to the pupil, but in no case are the rules given by the teacher. The inductive method is used. The pupil himself evolves the rules from his little store of sentences. A bright child will be from the start impressed by the different forms of the article, le père, la mère, l'abeille, les enfants, etc. The zeal and interest that the children show in trying to find the rules is a compensation for the few minutes thus employed, and the attention of the pupil who has discovered the reason of *l'* will not be caught sleeping before the mysteries of *ce* and *cet*, *beau* and *bel*, *vieux* and *vieil*.

With the reading begins the systematic study of grammar, but practice and observation still precede the rule. It is necessary for the pupil to study the principles of grammar which govern the French language, but rules are brought in only when he can base them on facts that he knows and finds in his reading and oral material. The memorizing of a rule is based on the previous memorizing of sentences in which this rule is applied. After the pupil has become familiar with the sentences, *le papier est blanc*, *la neige est blanche aussi*, *ce garçon*

s'appelle Henri, cette fille s'appelle Marie, ces enfants s'appelent Marie et Henri, etc., these same sentences are referred to when the teacher needs to bring in the rules that they illustrate. They are repeated orally and written on the blackboard and the pupil is asked to find the different forms and to tell when they are used. As he is already accustomed to different forms for different genders and numbers he will have no trouble in doing this. The book follows the same system. The reading matter is carefully chosen to introduce new grammatical forms, but rules are not given except in the form of examples. To supplement this and help the pupil's memory, the rules, when it is possible, are condensed in diagrams written on the blackboard and copied by the pupil in a note-book, thus:

	Mas.	*Fem.*
Sing.	blanc	blanche
Plur.	blancs	blanches

	Mas.	*Fem.*
Sing.	*ce*	*cette*
before a vowel	*cet*	*cette*
Plur.	*ces*	

The pupils memorize these diagrams.

The grammar study in the first year includes articles, the plural and feminine forms of adjectives, the plural of nouns; the demonstrative, possessive, interrogative, and numeral adjectives; the personal, possessive, interrogative, and demonstrative pronouns; the comparison of adjectives; the regular form of verbs in the present, perfect, and future tense, and some common irregular verbs.

As has been emphasized above, most of the work is oral and done in class under the supervision of the teacher, and with book closed. The first and larger part of each lesson is devoted to oral work without books. Much of this is review of the material already required for it is necessary to repeat the same sentences and the same forms of questions again and again until they are absolutely familiar to the pupil. Then comes the preparation of the new material, following the order given above; training of the ear, drill by repetition, questions and answers. The text of this oral material is not chosen at random. It prepares in advance the vocabulary of the book and fixes some

grammatical form. Thus the sentences: *Il y a de la neige sur la montagne, de l'eau dans le ruisseau, du feu dans la cuisine* prepare for the study of the partitive; *L'enfant que la grand' mère porte s'appelle Paul, l'enfant qui regarde les hirondelles s'appelle Henri,* prepare for the study of the relative, both as subject and object. In this way the text of the book is anticipated, the oral forms of the words presented in sentences being assimilated several days before the pupils find them in the book.

The second part of the lesson is devoted to reading and grammar. The short time allowed obliges the written work to be left entirely for home work, with the exception of examples and recitations. The written home work is based on the text of the book. It consists of questions to answer, sentences to put in the negative, giving the opposite of certain words, changing the person or tense of the verbs in the text, replacing the nouns by pronouns, etc.

Without absolutely precluding the use of English in class, French is always used by the teacher for orders or explanations, even if in the beginning he must translate some words to help the pupil to understand. All grammatical expressions are given in French. At the end of a few months the pupils are able to understand all the terms necessary for the conduct of the class.

M. K. B.

GERMAN

Grade VII

The introduction of German into the seventh year of the elementary school makes it possible, if the work is continued through the five high school years, to build up a more thorough course in a foreign language than is generally given before the college period. In a discussion of language teaching we are apt to give much consideration to the relative merits of the methods that emphasize reading or speaking. We argue sometimes that our geographically isolated position does not seem to make a speaking knowledge of a foreign language of the first importance, and that the limited time which is given to the subject in the secondary school period can be spent to better advantage if the stress is laid upon the acquisition of a reading knowledge of the language. Germany, France, Switzerland, Sweden and Denmark have taken the lead in demanding that the immediate aim of foreign language teaching should be to enable the learner to understand speech in the foreign idiom and to use it as a direct instrument of thought. Their methods are the natural results of this aim. Obviously the demand for a speaking knowledge, because language is essentially and primarily speech, calls for a method that gives prominence to oral exercises. An examination of the lesson programs of these countries will show that a longer time is given to the study of modern languages than in our secondary schools. In a *höhere Töchterschule*, in Germany, for instance, the last six years of a ten-year course include French, and English is taken up in the seventh year and carried on through the tenth. Students of these reform methods abroad are agreed that the results compensate for the time and effort put into the teaching. May we not, then, in a course of six years devoted to German approximate these larger aims and correspondingly more thorough methods, and try to build up step by step a facility not only to understand and read, but to speak the foreign language?

If our aim is to teach the pupil to speak German, the spoken idiom will be the basis of all instruction and oral exercises in the form of question and answer will form the backbone of the course. But it is not possible at the beginning to exclude the mother tongue entirely. Explanations involving grammatical difficulties will have to be given in English. Our aim, however, obliges us to introduce systematically as much German as the pupils can be taught to understand, and to use the mother tongue as a means of interpretation more rarely as the class advances. The meaning of strange words and phrases may be suggested in a number of ways without translation. For example, *Ich bin gross, klein; Ich arbeite, singe, spiele*, may be explained by gestures or by carrying out the action indicated by the verb. Pictures, too, are a valuable means of connecting ideas with the objects or actions they represent. And as the vocabulary of the class increases, paraphrasing can be made to reveal the sense of a difficult word or construction. By using the foreign language in the class room, by avoiding the English equivalent wherever it can be done without loss of time, by stimulating the pupils through a series of well graded exercises to use German in asking as well as answering questions, we shall aim in this course to develop gradually and thoroughly an oral and written command of the foreign language.

The conditions for such work in our school are from the viewpoint of numbers favorable. The two classes contain respectively twenty-two and thirteen pupils whose average age lies between twelve and thirteen years. Four periods of thirty minutes each are given to German each week. Perhaps the only drawback on the part of the class is their scant formal knowledge of English grammar.

In order to focus the attention of the class upon one thing as often as possible the first four weeks of the course this year were spent in building up a working vocabulary of the objects in the class room. No text-books were used. It is a period when the children learn to interpret the new sounds and are led to overcome hesitancy in their reproduction. In the first lesson the chalk was held up with the words, *die Kreide*. That was repeated slowly and distinctly. And then, with gestures to indicate what was said, the sentence, *Das ist die Kreide*, was given. *Was ist das? Das ist die Kreide.* The question asked

and answered by the teacher was easily understood and then we were ready for class work. The children answered the question individually and together. Soon they could not only reply, *Das ist das Bild, das Buch, das Mädchen, der Stuhl, der Tisch, der Knabe, die Tinte, die Tafel,* but they could also ask each other the names of the various objects they had learned. In every lesson exercises in hearing and oral reproduction were combined with writing and reading of what was written.

As the words and sentences were understood and repeated by the class, they were written on the board and made the basis of short oral drills in spelling. Each new word was spelled first by the teacher and then by the class until the children were familiar with the alphabet. Such oral spelling, taken up in different ways, was a daily exercise. It kept the class on the alert for mistakes and tended to develop care and increasing accuracy in the written work.

The prominence given to a correct enunciation was one of the chief features of the first months of the work. With each word that presented a new sound, a careful drill in pronunciation was given. The children were trained at first to notice differences in the sound values of vowels and the place and manner of their production. They learned to distinguish between the English word "rose" with the tendency of the vowel to become a dipthong, and the German *die Rose* with its clearer and purer vowel. Any sound in a word that caused any difficulty was isolated and practised in class until it was correctly given. If, as it happened occasionally, it was impossible for a pupil to give the correct reproduction, another, quicker of ear and of imitation, was permitted to teach it before the next lesson. It was always interesting to notice in such a case how anxiously the young teacher followed the efforts of his charge. As the stock of words increased,exercises in grouping words containing the same sounds together were undertaken from time to time. Only the guttural R caused any real difficulty. After the customary attempts at reproduction by each pupil, a few volunteered to give the sound, but their very carefully trilled R's were heard to be different from the sound produced by the vibration of the uvula. The children were quite satisfied to know that the trilled R was equally acceptable and correct. In such an elementary course in phonetics as this, all technical terms were avoided. Our

chief aim was to impress upon the class that they were not speaking German unless they reproduced carefully and exactly the correct German sounds. Good habits of articulation, once started, must be well watched throughout the work. It will not do to relax one's care after the first few months, for the children are very ready to fall back upon easier methods if they are permitted to do so. It would not be amiss to stop at any time during the instruction to give the necessary drill in pronunciation, and the children should be encouraged to take up their share of the work in criticising each other's mistakes.

To pass to the question of teaching vocabulary—whenever a new word is first met, we connect it at once in as many ways as possible with the old material. For instance, the adjective *fleissig* was applied to all the people in the Hölzel *Frühlingsbild*. Questions of the teacher brought the answers: *Anna ist fleissig. Sie arbeitet. Karl ist nicht fleissig. Er spielt. Die Mutter und der Vater sind auch fleissig. Die Grossmutter und der Grossvater arbeiten. Sie sind fleissig.* If this is done and every child in the class has been called upon to use the new word himself, if the oral impression is supplemented by the visual through board work, it is safe to assume that it will not be one of a number of words to be learned by heart at home, but rather that it has become the mental property of the child before he enters it in its appropriate list in the exercise book.

If such oral work is not to grow monotonous and lead to half-hearted, listless answers on the part of the few, quick reaction to the questions is necessary. Every pupil must be made to feel that it will be his turn to ask or answer the next question, or write the given sentence on the board. Chorus work, which is a great time-saver besides helping to launch the more timid ones upon efforts made alone, often imparts life to a lesson and makes each pupil feel that he is contributing his share to the work. Any device that will stimulate interest and enthusiasm and make the class feel that they are working together is permissible. The children go for example before the picture they are studying and repeat the conversation of the last ten minutes until they forfeit the right to go on through a mistake discovered by the other members of the class. Or, a pupil may ask a question and choose some member of the class to answer it. Anything which

suggests a game to them is apt to be entered into heartily. The verb *sein*, which was taught in the following manner after the class knew about twenty adjectives, kept every child busy either writing on the board or answering.

The teacher begins	1. *Ich bin* gross.
Then, pointing to a pupil,	2. Tom, du bist nicht gross. *Du bist* klein.
Wie bist du nicht, Tom?	Ich bin nicht gross.
Wie bist du? (same question is put rapidly to various other pupils)	
Heinrich, sage Tom, wie er ist.	Tom, du bist klein.
Klasse, ist er klug?	3. Ja, *er ist* klug.
Gretchen, ist Adelaide aufmerksam?	3. " *sie ist* aufmerksam.
Ist das Kind gut? (pointing to picture)	3. " *es ist* gut.
Klasse, sind wir fleissig?	1. " *wir sind* fleissig.
Kenneth und Vincent, seid ihr fleissig?	Ja, *wir sind* fleissig.
Teacher asks them to stand and speaks to them, Alice, sage K. und V. wie sie sind.	2. Gut, *ihr seid* fleissig.
	K. und V., ihr seid fleissig
Gretchen, sage es Tom und Alice.	T. und A. ihr seid fleissig.
Sind sie (pointing to class) gut?	3. Ja, *sie sind* gut.
Wie sind diese Kinder?	Sie sind gut.

Only the leading questions are suggested in this short outline. Each one calling for a definite form is quickly put to a number of children and the adjectives are varied to suit individual cases. The questions of the teacher alternate with those of the pupils. During this time the verb is written on the board sentence after sentence until the present tense is complete. When the class has acquired some familiarity with the application of these verb forms, several of the best pupils may be called upon to come before the class and give the whole tense. They indicate by gestures whether they are speaking, speaking to, or speaking of a person, and whether they mean one or more than one. This exercise necessitates the teaching of person and number, entirely new work in grammar for the class. As soon as all the children know these forms, the drill grows more rapid and expressions like, *Ich bin acht Jahre alt*, *Ich bin noch nicht gross*, *Ich bin nicht mehr jung*, are at once conjugated. No one will dispute that the pupil gains by this means a better understanding of

and a surer grasp upon the use of these forms than if he had been furnished at the outset with the paradigm for conjugation.

The book best adapted to the kind of oral work we do is Newson's *First German Book* of the Alge-Rippman series. These books are built upon the Hölzel pictures for the purpose of developing connected work in conversation and written exercises. They develop slowly and progressively the rules of grammar which serve as a means of systematizing the knowledge that is gained. As a result of our four weeks' work based upon object showing, we were able to pass over the first few lessons of the text-book quite easily. Our talks were now upon the first of the series of pictures, the *Frühlingsbild*. The old material was worked in wherever possible and an effort was made to keep all the vocabulary of the class in use. The picture was of much greater interest to the children than one would have imagined. It seemed to stimulate them and did much to make our work more spontaneous and natural. It was of great service too in facilitating the acquisition of a vocabulary. Whenever there was any hesitancy in the recollection of a word a pointing to the object in the picture in connection with which it was learned, served generally to recall it.

The use of verbs like *haben, singen, spielen, arbeiten, schwimmen, springen, fliegen*, at first only in the third person singular and plural, called for the plural form of nouns. By dividing these into four classes: (1) those that remain unchanged in the plural or simply modify the vowel (2) those that add *e*, or modify the vowel and add *e* (3) those that modify the vowel and add *er*, (4) those that add *n* or *en*, the way is easily prepared for the weak and the strong declensions. During this time preliminary exercises frequently consisted in asking the children to give the singular and plural forms of nouns as they pointed to the objects in the picture; or nouns were named by the teacher and the whole class would say: *Einzahl, das Buch, Mehrzahl, die Bücher*. Questions like: *Was tut der Vogel? Was tun die Vögel? Was tun die Ente? Was tun die Enten?* brought the answers:

Einzahl	Mehrzahl
Der Vogel flieg *t*	Die Vögel flieg *en*
Die Ente schwimm *t.*	Die Ente *n* schwimm *en*.

These sentences written on the board in this form served to

visualize the changes which the nouns and verbs undergo. As soon as the class understood what was wanted they were ready to add materially to the stock of examples. As we slowly developed the declension of nouns, case by case, we added to the use of the definite and indefinite articles, the interrogative, demonstrative, and possessive adjectives. The aim, that the pupils acquire a habit in the use of the correct forms, rather than let the recollection of the rule lead to its faltering application, was constantly kept in mind. The pupils' efforts to use as many of the new forms as possible were always encouraged by the teacher. This gave them increased confidence in their power to use the new language and helped to give life to the class work. After the development of the nominative and accusative singular, the genitive was taught in the following manner. The pupils learned by means of the picture,

Die Bäume des Waldes sind Tannen.
Der Schnee *des Berges* ist weiss.
Die Blumen *des Gartens* sind schön.
Das Fenster *des Hauses* ist offen.
Der Name *des Kindes* ist Anna.
Der Name *des Mädchens* ist Marie.
Die Farbe *des Grases* ist grün.

It was called to their attention through questioning that all the nouns used with *des* are masculine and neuter. This led them to deduce the rule for the formation of the genitive of masculine and neuter nouns. After the children have been called upon to give more examples the teacher can vary the exercises by means of such questions as: *Welche Bäume sind Tannen? Welche Blumen sind schön? Ist die Tür des Hauses zu? Sind die Blüten des Baumes rot?* Good examples have meanwhile been written on the board by various pupils. All have contributed to the work, for in answer to the command, *Noch einmal, die ganze Klasse*, all participated. The class is now ready for a short written exercise, which may take the form of a number of sentences written from memory, or the answering of questions put by the teacher, or of a simple dictation. Thus, analysis and induction form the basis of grammatical instruction.

The question of the teacher leads to the independent observation of the rule on the part of the pupil. However, the primary object of such grammar teaching is not that the pupils

shall be able to recollect rules and exceptions, but rather that he shall at any moment be able to use the right inflection or construction without conscious effort. Paradigm work in declension was attempted only after the pupils had gained some fluency in the use of the cases. In this way the children acquire the right attitude towards the language: it is to be talked rather than talked about in the rules and exceptions of grammar.

During the period of declension-teaching, the home work was largely upon the formation of sentences involving the use of each single case as it was developed. To give facility in the use of the genitive of the possessive pronoun, sentences like these were given:

Hier ist das Buch meines Freundes.
Dort ist das Bild meiner Freundin.
Der Garten meines Onkels ist nicht gross.
Ich habe das Buch meines Vaters
Ich sehe das Haus meiner Tante.

The class then wrote out all the forms, each time making a complete sentence in this manner:

Hier ist das Buch meines Freundes.
Hier ist das Buch deines Freundes etc.

The nouns may be varied as,

Ich habe die Tinte meiner Lehrerin.
Du hast das Heft deines Bruders.

Sometimes questions calling for the use of the different cases were answered, or blanks for personal and inflectional endings were filled in. Later on, paradigm declensions were called for, with a sentence to illustrate the use of each case. The home work must of course be closely connected with the work in the classroom. Careful preparation and constant drill there must have preceded the attempt to do the work at home. Children like to do what they feel they can do. Care and accuracy are encouraged by giving them work they are capable of doing well. And finally, it is important that the home assignment be as definitely stated as though it consisted of the next twenty sentences to translate.

During the first few months not much memory work was attempted. From time to time, however, work in conversation that could be used in a dialogue was memorized. Thus, for example, two boys represented Karl and Heinrich, and two or

three girls Marie, Luise and Anna. Karl and Heinrich began, *Unser Onkel Hans ist auch euer Onkel*, and the sisters reply, *Ja, und unsere Tante ist auch euere Tante.* The brothers continue, *Unsere Eltern sind auch euere Eltern. Ihr habt wie wir einen Grossvater und eine Grossmutter* u.s.w. Or to give practice in the use of the polite form some of the children would be Herr and Frau Braun, while one or more of the others address them in this fashion: *Herr Braun*, or *Frau Braun*, or *Herr und Frau Braun, Sie haben ein Haus und einen Garten. Sie haben Enten und Entchen. Ihre Kinder sind brav. Sie sind glücklich.*" The children were not too old to enjoy this form of "make-believe." They liked to represent the different people in the picture in conversation and at times suggested changes that added materially to the interest of these dialogues. As the class progressed proverbs and a few selections from the poetry in the text-book were committed to memory. Shortly before Christmas, the class learned to recite and sing *O Tannenbaum.* A small, wooden Christmas tree, very evidently made-in-Germany, was the subject of an introductory conversation lesson to give the vocabulary of the poem. Although they had been told that it was not necessary to learn the poem unless they liked it well enough to do so the whole class with two exceptions knew the first verse before we started to sing it. To impart the right atmosphere at the time, a short account in English of how Christmas is spent in Germany was given.

From the beginning of the course the class-room language of the teacher was used as a means of giving added practice in hearing and using German and of increasing the vocabulary of the class. To the commands: *Gehe an die Tafel, Höre zu, Setze dich, Passe auf, Sprecht leise, Öffnet die Hefte, Schliesst die Bücher, Legt die Federn nieder,* the children were taught to reply in the first person singular or plural in answer to the question. *Was tust du? Was tut ihr?* Even though the class cannot always answer in German, it is obvious that asking the questions in that language will tend towards a growing familiarity with the spoken word and help to create a habit for the use of the correct forms. Children learn to understand such questions as Warum sagen wir—Ich habe ein*en* Hund, aber, Ich habe ein

Buch? or, Warum haben wir hier in allen Fällen der Mehrzahl die Endungen? if the effort in that direction is made slowly and systematically by the teacher. In this manner we pave the way for the gradual exclusion of the mother tongue during the language lesson.

In order to give each pupil the necessary practice in hearing, speaking, writing, and reading the new forms, progress is necessarily very slow. By the end of the year the pupils have studied only the Frühlings and Sommerbild, work covering twenty-nine lessons of the text-book and involving the following grammatical knowledge: declension of nouns, conjugation of the present tense and imperative mode of the various types of verbs, governance of the common prepositions, the use of the possessive and personal pronouns, the predicative and attributative use of the adjectives, a practical acquaintance with cardinals and ordinals, and the use of the most common adverbs. Their knowledge of word order is limited to that in principal propositions and their vocabulary amounts to about five hundred words. And yet, such a method has its apparent advantages. The self-activity of the pupil is stimulated to an appreciable degree. He finds his rules through his own strength and independent reflection and forms his own examples. He gains a gradual but thorough acquaintance with and a feeling for forms. From day to day he is taught to apply what he has learned in a practical way in the school-room conversation. No attempt is made to teach all the grammar in one or two years. That is perhaps the greatest advantage of a course which permits the pursuit of such methods. If the pupil receives a thorough grounding in practice combined with theory through the use of a carefully graded series of books, it will insure on his part such a knowledge of the language as will induce him to go on with the study by himself if he is obliged to drop it in school after three or four years.

F. J. H.

SOCIAL ACTIVITIES OF THE HORACE MANN ELEMENTARY SCHOOL

One of the most striking features of the modern school is its character as a social organism. Observers are generally more conscious of this in the lower grades where the kindergarten spirit of social service is often strongly felt, but every year more of the kindergarten spirit is permeating the once stagnant grammar grades and bringing an active spirit of co-operation into play. In the Horace Mann School this co-operative spirit is manifest from the chapel exercises in the morning until the final good-bye at noon. Our pupils, who come from all parts of the big city and outlying suburbs, meet on a very democratic ground and are keenly interested in one another. The early morning assembly brings nearly a thousand pupils of all ages, from the little folks of the primary grades to the dignified High School seniors, into the auditorium for general exercises and song. The value of these brief services in which all join, uniting the pupils in a common act of worship, cannot be overestimated and gives the keynote of unity for the day. On one morning in the week the elementary grades have the auditorium to themselves for opening exercises and these are then given a more social character. Each week some one grade has charge of the program. This grade selects the hymns and Bible readings and prepares a brief entertainment of recitations and music. The eager pride and concern of the class entertaining is met by an equally hearty interest and delight on the part of the listeners.

The daily class-room occupations are now begun, and in the upper grammar grades each recitation becomes an opportunity for co-operation as well as for self-help. In the arithmetic class we find, perhaps, a group of pupils who have measured with a triangle the height of the school building and one member of the group demonstrating to the class, by means of a blackboard diagram, the manner in which the result has been gained. The class listen earnestly and question keenly, attacking every misstatement or asking for further explanation, where a point

is not understood. If the one explaining is nonplussed or unable to answer, some other one of the group takes up the work and helps out. Courtesy is insisted upon throughout and the questions, although keen and to the point, are expected to be given and answered in a spirit of good comradeship and a common desire to understand.

Another section of the same grade is in the adjoining room listening to a classmate's report of the cause of the California earthquake as explained by the scientists. Group work is again in evidence here, a committee of pupils having collected all possible maps and pictures bearing upon this and upon similar catastrophes and having arranged them as an effective illustration of the recitation. Other pupils add to the account given and question as to details. The history class is having a review lesson, using lantern slides to show pictures of famous battlefields, and as each picture is thrown upon the sheet a member of the class rises and gives to his classmates a brief statement of the events connected with the picture.

In the grammar class we make our own text-books after studying together sentence structure and the uses and definitions of parts of speech. Each pupil plans his own table of contents, deciding for himself on what to lay stress and what order of chapters best develops the subject. Then as each chapter is written, the manuscript is laid upon the classroom table for class comment and criticism. A spirit of hearty good-will and pride in the achievement of classmates is the result of these comparisons.

In other branches of English work the spirit of co-operation is enlisted wherever possible. The pupils often read and criticise one another's compositions, each pupil, in addition to marking errors as he sees them, being required to write some general comment on the paper, stating what good points he has noted in the work as a whole and what general faults. In the literature class a part of the lesson consists of oral reading by individual pupils, to which the others give active attention with the purpose of making some helpful criticism at the close of the hour, while the reader has, for his aim, to interest his hearers and make plain to them the author's meaning. Generally the pupil who reads takes his place in front of the class so as to direct his reading toward his classmates as well as to the teacher. This

leads in time to a more natural tone of voice and less stiffness and formality in the recitation. At the beginning of the year, before the pupils are well acquainted, they are often a little embarrassed and dislike to come forward, but as all are expected to do the same and no notice is taken of the occasional shyness, it soon wears off and the pupils gain freedom from self-consciousness and express themselves quite naturally and with increasing confidence.

An immense power in the social life of our pupils is found in the art, gymnasium, and manual training classes. Here the work admits of a freer interchange of ideas, and an absence of restraint as they move freely about the room and consult, unrestrainedly, about the details of the work in a way not desirable in classroom recitations. Thus is given a possibility of social co-operation eagerly made use of by teachers and pupils. The boys in their wood work make a number of individual models and in addition always work out one group problem. This is one of the most valuable parts of the year's work, bringing into play a spirit of common interest in one project which makes for united effort. The project varies from year to year as the needs of the class, or its character, vary. One year the boys built a house, another year a railroad track and train of cars, and the present class have designed and are making a wooden railing with window openings for the bank in which the business transactions of the classroom are made. One year the boys designed and fashioned a hymn board for use in the school auditorium at morning chapel exercises, thus serving the entire school.

In the cooking class the girls combine in twos at their tables for washing dishes and other general purposes. Some article of food is prepared, each measuring and combining her own ingredients independently, but sharing the finished product with classmates and teachers.

Much of the gymnasium work for both boys and girls partakes of the same social character. In the team play of basket ball, the relay races, passing the ball, and other games the boys are given an invaluable opportunity for much friendly rivalry and co-operation. The girls' games of volley ball, basket ball, cat-and-mouse, and others offer a similar opportunity. Through the winter months an opportunity is given the boys of the upper grades for optional gymnasium work after the close of school each day.

The fifth, sixth, and seventh grades take turns in this afternoon work, going to the gymnasium for an hour's play at basket ball or other exercise. A special director is on hand to supervise the exercise and to teach the boys the rules of the games. The classroom teachers encourage the pupils to stay for this afternoon work and are often on hand to show their interest. A special schedule of games between classes and with other schools is made up, as soon as the boys get well into practice, and to these games the girls and other friends or parents are invited. Great enthusiasm is shown by the spectators at these contests and a healthy class spirit is engendered.

The art work in the studio, where opportunity is given to criticise and appreciate each other's work, brings the boys and girls together in a common aim. This year an additional stimulus toward united effort has come through an attempt by all the seventh-year pupils to design a cover for the school magazine. The designs were submitted to the art supervisor of Teachers College for judgment, and the best was selected and actually used as a cover for the Christmas number. The other designs that deserved praise were reproduced in a later number and a healthy interest in one another's work was thus aroused throughout the school.

Of general social activities outside the regular schoolroom work the school magazine is one of the foremost. Each grade of the school above the third appoints a sub-editor for the grade, whose duty it is to gather the best stories and poems and pictures from his classmates each month and submit these to the editorial board for selection, together with a brief report of his own on the monthly news of this grade.

Another means of promoting the social life of the school is found in the class play. In the upper grades each year one or more grades usually give jointly a dramatic performance at some time during the winter or spring. This play is often written by the pupils themselves with some help from their teachers, and is connected with the daily lessons. One year, for instance, the pupils of the sixth grade, after reading *Ivanhoe*, dramatized and produced several of the most striking parts of the story in some very effective scenes. The rehearsing of the play brought the boys and girls together in the afternoons and gave opportunity for social intercourse of a very pleasing nature, while the pupils discussed the

characters and scenery and helped one another by practical suggestions as to costumes and stage properties. Another year the pupils of the fifth grade wrote a play called *The Minotaur*, based on their reading of Hawthorne's *Tanglewood Tales*, and produced some very remarkable scenery, even to a moon which rose at the proper time quite in the modern theatrical way. The pupils of the seventh grade changed Longfellow's *Courtship of Miles Standish* to dialogue form under the direction of their teacher and painted, under the art teacher's direction, some excellent scenery for the opening scene. And again in the history class, pupils of the same grade, after studying the Ante-Revolution period, produced a clever little one-act drama representing a dream in which the famous men of the period discuss the questions of "Taxation without Representation." In addition to these plays compiled in great part by the children, pupils of the seventh grade have read in class and afterward acted scenes from *Julius Cæsar* and *As You Like It*. To these plays not only the other members of the the class giving the play are invited, but where possible the pupils of the other grades. Some of those not acting find ways of helping as curtain raisers, ticket takers, scene shifters, or members of the orchestra, while others form an appreciative audience.

As the school year advances toward spring and our boys and girls can get out of doors, we have many little afternoon excursions which promote close acquaintance and good-fellowship. Groups of pupils with their teachers visit Central Park to study the birds, others go across the Hudson to forage the New Jersey woods for frogs' eggs and wild flowers. Sometimes a whole class visits some point of historic interest, as Washington's headquarters at Morristown, or Tarrytown and Sleepy Hollow.

Another spring celebration is the May festival, and this has been one of the most satisfactory because all the children of the Elementary School could take part. The large gymnasium is used and is decorated by groups of the older pupils with boughs of green brought by those boys and girls who live in the suburbs. The classes enter marching in turn, beginning with the little kindergarten children and ending with the upper grammar grades. After all are seated each class in turn takes the centre of the hall for a May dance or game. This party is the only one of the year in which all grades join, and the older pupils look with keen interest and applaud heartily the efforts of the little folks, who in their

turn admiringly watch the larger boys and girls and strive to imitate them.

It will be seen from this brief sketch of our activities that the keynote of our school is social living. As far as possible our everyday work is based on the spirit of doing heartily and with the co-operation of every member of the class whatever duty is at hand. Our pupils are healthy, active, happy American boys and girls, and are to become, we hope, citizens in the true sense of the word. For such citizenship they need more than mere academic instruction. They are to take part in the manifold enterprises of the future in the midst of an exceedingly complex civilization. The need of the age is for earnest, broadminded men and women, who can join effectively in business and in recreation, who can bear criticism and profit by it, and who have many resources and many avenues of expression. To meet this need we should no longer train our pupils along the old scholastic lines. The evolution of the race is toward society as the unit, and though we as teachers must not lose sight of the individual, neither must we allow the individual to lose sight of his fellow-men, for through mutual service lies the best road to self-development.

L. E. R.

TIME SCHEDULE

Grade VII

Number of minutes per week devoted to various activities.

Literature	100
Language	140
Geography	120
History	120
Arithmetic	120
French	120
German	120
Manual Training	75
Art	40
Music	30
Physical Education	100
Recess	75
Opening Exercises	75

ALUMNI DEPARTMENT

Committee of the Alumni on Publication

Ernest N. Henderson, Ph.D., 1903, Chairman.
Adelphi College, Brooklyn.
Ellen Yale Stevens, Diploma, 1893.
Brooklyn Heights Seminary, 18 Pierrepont St., Brooklyn.
Emily Brinckerhoff Brown, Diploma, 1901.
Bretton Hall, Broadway and 86th St., New York City.
Ruth E. Dowling, B.S., 1903.
New York Training School for Teachers, New York City.

Columbia University Quarterly for June,—The issue of the *Columbia University Quarterly* for June devotes to Teachers College nearly one hundred pages of contributed articles, editorials, current news, and alumni notes. Dean Russell writes of "Standards of Scholarship and the Professional Spirit in Teachers College," Professor Dewey of "Education as a University Study," and Professor Suzzallo of "The Status of Education in American Universities"; Professor Baker contributes "A Sketch of the History of Teachers College," Professor Tombo a statistical study of "The Growth of Teachers College," and Professor Monroe a paper on the "Professional Distribution of the Graduates of Columbia University and of Teachers College." There are also accounts of the publications of the college, of the college schools, and of the advantages of New York as a center for educational study. Among the illustrations are new views of the buildings, a sketch of the new school of Domestic Economy, and a number of interiors.

A limited number of copies of this issue of the *Quarterly* have been secured by the college for distribution without charge to alumni who apply to the Secretary.

Professor Dewey's article thus sums up the problem of the universities with regard to education.

There is an additional reason for attaching importance to education as a university discipline under American conditions.

Our political and scoial traditions are against any systematic and centralized control of education from governmental centers and bureaus. Extreme local self-government is the rule in education even more, if possible, than in other parts of our administrative processes. Some regret this; others see in it a recognition of the change in the spirit and ideals of education that must come with democracy. When the aim is a suppression of many features of individuality, especially those which make for variation and initiation, by running all into a common mould, an authoritative system proceeding by hierarchical gradations, from superior to inferior, till at last it reaches the *infimus gradus*, the child, is natural. But if development of self-initiative and self-responsible personalities is the aim, there must be greater opportunity for flexibility, experimentation, and local diversity. But whether one regret or approve, our educational systems are in need of some sort of direction from expert sources. If it does not come with coercion, it must come voluntarily. If it is not undertaken with the authority of a bureaucracy, it must be with the authority of science and philosophy and history. The universities are the natural centers of such free and sympathetic organization. It is for them to gather and focus the best that emerges in the practices of the present: it is for them to experiment in the development of more adequate conceptions of subject-matter, and to issue the results to the school with the *imprimatur* not of officialdom but of intelligence. Through education of leaders, through the avenues of persuasion and conviction, they must perform the task of selection and of organization, which ministers of education effect under more autocratically centralized schemes. In fine, the scientific study of education should represent the finest self-consciousness of the university of its own work and destiny—of its mission for itself and for the society of which it is both minister and organ.

Dean Russell's article concludes with this summary of the attitude of Teachers College in endeavoring to meet the situation.

That which gives zest to our work and is manifest in the spirit of our faculty and the devotion of our students, is the everyday touch with practical life. Every student knows what he wants and every instructor is daily forced to meet a practical

situation. What is the meaning of education?—not merely for some one else at some time more or less remote, but for us Americans in this twentieth century? What is a good school and what should it do in a democracy.? What is the relation of education to crime and how can character be morally insured? What should be done with the atypical and abnormal child, with the children of foreigners, and the waifs of the street? What is the cost of schooling as it is given and how can more be given for the money? How can poor teachers be made better teachers and lifted above the plane of time serving? Is this course of study the best for these conditions? What can be taught advantageously in this particular subject when nine-tenths who study it can give only five hours a week for forty weeks? How can it be presented with the minimum of effort? What is the purpose of this particular school in my own home town?—such questions as these are ever before us and they demand an answer. No one of average intelligence with good red blood in his veins can fail to be interested when confronted with problems so fundamental in our social life. If scientific interest and the impulse to relieve human suffering are sufficient inducement to professional service in medicine, surely the desire to alleviate human misery and to pass on to the next generation the best spiritual possessions of the present should tempt any person altruistically inclined to become a teacher, in the hope that his work may be a perpetual benediction to all who share its fruits. This is, I believe, the spirit of Teachers College and to my mind it is our most valuable asset.

The provisions for the study of education made by the leading American universities, and the comparative numbers of students taking advantage of them, are indicated in the following tables from the study by Professor Suzzallo.

TABLE I.

Provision of teaching positions for instruction in educational theory and practice.

Compiled from the list of officers given in the latest available registers, usually those for the academic year 1906–07, less frequently 1905–06. Adjunct professors have been classified with associate professors, and tutors with instructors at Columbia University. Associates and instructors have been classified together in the case of Chicago University.

Name of University	Primarily Officers in Department or School of Education					Professors Coöperating from Other Departments
	Professors	Associate Professors	Assistant Professors	Instructors	Lecturers	
Without Provision						
1. Catholic University						
2. Johns Hopkins						
3. Princeton						
Single Professorship						
4. Pennsylvania	1					
5. Yale	1					
Department of Education						
6. California	1	1	2		2	
7. Clark	2	—	1			
8. Cornell	1	—	1			
9. Harvard	1	—	1			
10. Indiana	1	1				
11. Michigan	2	—	1			
12. Nebraska	2	—	—			
13. Northwestern	1	1	1			
14. Ohio State	1	—	1			
15. Leland Stanford	1	—	1	1	1	
16. Virginia	2		1			
17. Wisconsin	1	1	1	1		
Teachers College						
18. Columbia	20	6	—	39	7	5
19. Chicago	3	5	3	10	2	(?)
20. Illinois	1	—	2	—	6	(?)
21. Minnesota	1	1	—	1	12	28
22. Missouri	3	—	1	1	—	18
23. Syracuse	1	—	—	—	—	(?)

TABLE II.

Showing total registration in graduate department, undergraduate liberal arts course (including education), and summer school, **also registration of students in courses in education** given in each of these departments.

Name of University	Number of graduate students		Number of undergraduate students in liberal arts course, including education		Number of students in summer session	
	Total	Education	Total	Education	Total	Education
California.....	204	49	1495	198	707	130
Columbia.....	808	260	1470	865	1018	134
Cornell.....	232	10	705	125	642	140
Harvard.....	412	29	2448	177	779	38
Illinois.....	123	6	700	150	512	100
Leland Stanford.....	67	6	1283	207	....	....
Michigan.....	114	14	1566	300	1047	75
Minnesota.....	57	20	3186	290	340	65
Missouri.....	157	23	1000	300	403	125
Nebraska.....	128	26	959	221	211	73
Northwestern..	42	10	862	81	....	....
Ohio State....	41	2	575	65	280	83
Pennsylvania..	250	42	2000	130	200	30
Wisconsin.....	137	3	1503	188	550	50
Total.....	**2772**	**500**	**17952**	**3297**	**6689**	**1043**
	Per cent. of total, 18.01— Ratio, 1 to 5+		Per cent. of total, 18.31— Ratio, 1 to 5 +		Per cent. of total, 15.59+ Ratio, 1 to 6+	

A European estimate of the usefulness of Teachers College.—An interesting European estimate of the usefulness of Teachers College is given by Professor Strong at the University of Edinburgh in the March issue of the *Westminster Review*.

Already the Americans have begun to realize the necessity of giving some such distinction to education. Many of their large universities have initiated separate departments, faculties, or schools of education, taking rank with the departments or faculties of medicine, law, philosophy, etc., and those universities not so provided are rapidly coming into line.

Recently, with a view to making a special inquiry into their work, I paid a visit to two of the most progressive and distinguished of these schools of education. Without doubt their

influences are very great, and are tending to create a more favorable public opinion regarding education. In my report, I stated that Teachers College, the school of education of Columbia University, New York, approximated more nearly to the realization of the ideal in education than any other attempt yet made. As an institution for the training of teachers, it is unique. We have no institution in Great Britain in any degree approaching it. The best of the German methods of training the teacher have been adapted, modified, and adjusted to their new environment, and the result has been admirable; but whether an institution on precisely the same lines would succeed in this country would be a question for careful consideration. Be this as it may, Teachers College, practically unknown ten years ago, now attracts students from all parts of the world. Experienced teachers, administrative officers, and representatives from all the ranks of education, are to be found among its students. Its success is largely due to its early recognition of the necessity of the training of teachers for all grades of work, from the kindergarten to the university: for the training of the elementary teacher to that of the highest specialist and educational expert. In no other profession but teaching is the necessity of the highest training for experts unrecognized, and the administrative board of Teachers College, shrewd enough to note this anomaly, advanced education to a rank coördinate with other professional departments. The superiority of the training of the secondary teacher in Germany has long been acknowledged; but in view of the great advance in training in recent years in the United States, this supremacy is hardly likely to be maintained. One does not require to be a pro-American to recognize that in the matter of the higher training of teachers, in the sympathetic attitude towards education and its problems in elementary, secondary, and higher work, the large American universities show an enlightenment far in advance of any of our British universities.

Registration figures for 1906–07.—The final summary of registration figures for the academic year 1906–07 showed a total of 1,137 candidates for diplomas and degrees—742 primarily registered in Teachers College, 138 in the summer session, and 257 from other parts of the University. In

Attendance

addition there were 1,558 non-matriculated extension students taking courses at the College; and 1,297 pupils in the college schools. The grand total of 3,969 persons receiving regular instruction at the College marks an increase in attendance of 522 per cent. in ten years. With one hundred and fifty-two candidates for advanced degrees, Education continued to be the most popular subject of graduate study in the University, the departments most nearly approaching being economics and sociology (114), English (106), and philosophy (56). It continued to be second in popularity as a minor subject, being exceeded by economics and followed by history, philosophy, and psychology in the same order as hitherto. Among the professional students there was a notable increase in attendance, especially in the departments of domestic science, fine arts, and German. Of the graduate students two-thirds were men, of the undergraduates three-fourths were women. Three-fifths of the total number of students came from one hundred and twenty other universities, colleges, and professional schools, Smith and Vassar, the University of Michigan and Harvard taking the lead. There was an especial increase in the number of college graduates in the departments of kindergarten, elemenatry education, and domestic science. One-third came from one hundred and fifty normal and teachers' training schools. After the North Atlantic divisions the middle west was best represented.

The Journal of Geography.—Beginning with the current number, the Journal of Geography under the management of its original editor, Professor RICHARD E. DODGE, will be published by Teachers College. Coincident with this change there will be inaugurated several important innovations which should go far toward making the Journal available for an even wider circle of readers. Teachers College believes in making its publications accessible at a minimum cost to teachers and workers in education. Hence the price of the Journal will be reduced, beginning with the volume for 1907, to one dollar a volume and the size of the volume will be decreased from 480 to 320 pages. Subscribers who have already paid in advance will have their subscriptions extended according to the new rates and in proper proportion. These changes will make it possible for subscribers to send their contributions more easily and will render the Journal more

available to the large number of teachers who cannot readily subscribe for the more expensive Journal.

As soon as the present delay in publication can be overcome every effort will be made by editor and publisher to have the Journal appear promptly. No one regrets more keenly than the Editor the present lateness of the Journal. As was stated in the December number the Journal has been published in the face of almost overwhelming difficulties at times. The changes announced above will make the future of the journal more assured and will enable the Editor to make the Journal what he has long desired to have it. Under the new favorable conditions the new decade should be far more satisfactory to all than the decade just closed.

The Editor bespeaks the continued help of the friends who have had faith in the Journal for these several years. He requests their assistance in making the Journal better and better known and trusts that the paper may prove even more helpful in the future than in the past.

Plans for the domestic economy building.—Since the gift of $400,000 for a domestic economy building, the heads of the departments of biology, domestic art, and domestic science, with a special officer appointed for the purpose, have thoroughly canvassed the literature of the subject and have visited and studied the equipment for such work, in a score of other institutions. The resulting suggestions and the growing needs of the departments have been embodied in plans by Parish and Schroeder, the architects of the Thompson Building. The new building will stand on 121st Street, forming the north side of a new quadrangle of which the main building and Whittier Hall constitute the east and west sides. Work is already under way, and it is hoped that occupancy may be begun in September, 1908.

New Building

The following recent appointments and reappointments will be of interest :

1898. Harlan Updegraff, A.M., has been appointed assistant to the U. S. Commissioner of Education.

1899. Guy E. Maxwell, A.M., is president of the State Normal School at Winona, Minn.

1900. Alice R. Jackson, A.M., has been made teacher of English in the Brooklyn Training School for Teachers.—Rudolph R. Reeder, Ph.D., is superintendent of the New York Orphan Asylum, Hastings-on-Hudson, N. Y.

1901. Oscar L. McMurry, B.S., is director of the department of manual training in the Chicago (Ill.) Normal School.

1902. Russell H. Bellows, B.S., is superintendent at Watervliet, N. Y.

Of the 1902 A.M.'s with majors in education Elizabeth H. Bunnell is an instructor in the Training School for Teachers in Brooklyn; David E. Cloyd is principal of the high school, Spokane, Wash.; Marion S. Coan and Mary Percival are teaching English in the Normal College, New York City; Darius Eatman is professor of education at Wake Forest College, Wake Forest, N. C.; John W. Hall is professor of elementary education in the University of Cincinnati; Holly W. Maxson is principal of a public school at Utica, N. Y.; Lake George Watson is superior of practice work in the State Normal School at Mayville, N. Dak.; Oscar Israel Woodley is superintendent of schools at Passaic, N. J.

Of the 1902 Ph.D.'s whose majors were in education, Frank P. Bachman is professor of the history and principles of education in the Normal College of the Ohio University; Edwin C. Broome is principal of the elementary department of Adelphi College, Brooklyn; Frank Rollins is principal of the Stuyvesant High School, New York City, and George A. Hubbell is president of Highland College, Williamsburg, Ky.

1903. Among those who received the degree of B.S. in 1903, Arthur H. Chamberlain is dean and professor of education at Throop Polytechnic Institute, Pasadena, Cal.; Mary C. De Bardeleben is principal of the preparatory department in the State Normal School at Shorter, Ala.; Ruth E. Dowling is teacher of methods in geography in the New York City Training School for Teachers and Blanche Hirsch is principal of the Alcuin Preparatory School, New York City.

Among the A.M.'s of 1903 Clarence Cherrington Henson, A.M., is vice-principal of the Newman Manual Training School, New Orleans, La.

Of the 1903 Ph.D.'s Ernest N. Henderson is professor of education in Adelphi College, and Ernest B. Kent is principal of a technical school in Philadelphia.

1904. Among those who earned the B.S. in 1904 James E. Addicott is principal of the Newman Manual Training School, New Orleans, La.; Frank W. Ballou is assistant professor of secondary education in the University of Cincinnati; Josephine T. Berry is professor of domestic science in the Northern Illinois Normal School at De Kalb, Ill.; Frank R. Cauch is supervisor of manual training in the schools of Oakland, Cal.; Frances I. Davenport is principal of the Concord State Normal School at Athens, West Va.; J. Florence Gilliland is critic in the training department of the Brockport, N. Y., State Normal School; Anna C. Hedges, recently director of the domestic arts department at Pratt Institute, is now principal of the Hebrew Technical School for Girls, New York City; Mary Rogers is director of the work in drawing in the New York City Training

School for Teachers; Cliff W. Stone is principal of the elementary department of the Ethical Culture School, New York City; Mrs. Mary A. Walker has been appointed principal of the Cathedral School, Washington, D. C.

Of the 1904 A.M.'s Frederick B. Abbott is professor of manual training in the State Normal School at Emporia, Kans.; William W. Andrew is principal of the elementary school in Rochester, N. Y.; Alfred H. Armstrong is headmaster of the St. Bernard's School, Gladstone, N. J.; Amy M. Burt is instructor in history, Central Michigan Normal School, Point Pleasant, Mich.; Anna M. Clark is teacher of nature study and elementary science in the New York City Training School for Teachers; Alexander B. Coffee is professor of philosophy and education in William and Mary College; Charles T. Grawn is principal of the Michigan State Normal School at Mt. Pleasant, Mich.; George E. Marker is head of the department of education, State Normal School, Cheney, Wash.; Lucius K. Russell is instructor in chemistry, Simmons College; Charles W. Wood is professor of English in Tuskegee Institute.

Of the 1904 Ph.D.'s in education Frederic E. Farrington is assistant professor of education in the University of California; Naomi Norsworthy is instructor in educational psychology in Teachers College.

1905. Of those who received the degree of B.S. in 1905 Mary D. Chambers is instructor in chemistry and home economics in Rockford College, Rockford, Ill.; Richard McL. Crawford is professor of art and manual training in William and Mary College; Ann M. Gilchrist has accepted the post of domestic science supervisor for New Zealand, introducing the subject there for the first time; Shirley E. Gray is teaching English in Oriental Negros Island, Tanjay, P.I.; Frances H. Hibbard is supervisor of primary work in the public schools of Montreal, Canada; William S. Marten is director of fine and manual arts in the schools of Durham, N. C.; Grace Owen has become assistant in the department of education, Victoria University, Manchester, England; Maud Whitlock is director of public kindergartens in Los Angeles, Cal.; Nora B. Whitney is preceptress of the high school at Rye, N. Y.

Of the 1905 A.M.'s in education Myra B. Clark is professor of home economics at the Clarkson School of Technology, Potsdam, N. Y.; Irwin W. Driehaus is teacher of science in the New York City Training School for Teachers; Luella H. Eakins is instructor in Greek and Latin at Greenville College, Greenville, Ill.; John W. Heckert is instructor in education, State Normal School, Natchitoches, La.; Franklin S. Hoyt is assistant superintendent of schools in Indianapolis, Ind.; John Kelley is superintendent of the Normal Training School at Mt. Pleasant, Mich.; Susan A. Lathrop has gone from her instructorship in the Horace Mann School to an instructorship in English in Wellesley College; Arthur R. Maxson has been made tutor in mathematics in Columbia; Alva W. Stamper is head of the department of mathematics in the State Normal School of Chico, Cal.; Mary E. Thompson is critic teacher in the State Normal School at Mt. Pleasant, Mich.; Samuel Sung Young has returned to China as president of the College of Foreign Languages in Canton.

Of the Ph.D.'s in education in 1905 three have the rank of professor: Charles J. C. Bennett in philosophy and education in Louisiana State University; Junius L. Meriam in the theory and practice of teaching at the University of Missouri; and Bruce R. Payne in secondary education at the University of Virginia. Five are adjunct or associate or assistant professors, namely, Ellwood P. Cubberley and An-

thony Henry Suzzallo, both in education at Stanford University; Edward C. Elliott in education at the University of Wisconsin; George D. Strayer in elementary education at Teachers College; and Fletcher H. Swift in education at the University of Washington. Walter F. Dearborn is instructor in educational psychology in the University of Wisconsin.

1906. A number of those graduating in 1906 with the degree of B.S. have already won positions of some distinction. A partial list follows: Caroline Van Rensselaer Ashcroft is supervisor of physical training, New York City public schools; Alma L. Binzel is director of kindergarten training, Stout Training Schools, Menomonie, Wis.; Annie S. Crowell is instructor in the Hyannis (Mass.) Normal School; Amy L. Daniels is supervisor of household science and arts in the Technical High School, Springfield, Mass.; James J. Doster is director of manual training State Normal School, Troy, Ala.; Louise M. Fisher is an instructor in physical education in the New York City Training School for Teachers; Annie J. Gash is professor of domestic science and art, Greenville College, Tusculum, Tenn.; Theda Gildemeister is instructor in methods, State Normal School, Winona, Minn.; Julia A. Hill is instructor in fine arts, Teachers College, Syracuse University; Herman H. Hoexter is director of the department of music, State Normal and Industrial College, Greenville, N. C.; Dora Ladd is instructor in manual training State Normal School, Greeley, Colo.; Alice L. Marsh is head of the department of method, State Normal School, Geneseo, N. Y.; Venita Pendleton is instructor in English, Bryn Athyn College, Bryn Athyn, Pa.; Florence A. Pray is instructor in domestic science, State Normal School, Kalamazoo, Mich.; Janette Trowbridge is physical director, Wadleigh High School Annex, New York City; Louise Waugh is instructor in domestic science, Michigan Agricultural College. Three members of this class secured posts at Teachers College: Ethelwyn Miller in fine arts at the Horace Mann School; Luella Palmer in kindergarten at the Speyer School; and Mary D. Swartz, assistant in domestic science in Teachers College.

Among the appointments of 1906 A.M.'s are the following: Luther J. Abbott, superintendent city schools, Minco, Oklahoma; Hettie M. Anthony, instructor in domestic science, Illinois Wesleyan University; Elizabeth Crowther, instructor in history, Western College for Women, Oxford, O.; Susan R. Benedict instructor in mathematics in Smith College; Don Carlos Bliss, superintendent of schools, Arlington, N. J.; Helen Frances Durie, instructor in English and history, Kingsthorpe College, Hamilton, Ontario; William T. Fletcher, principal of the high school, Pueblo, Colo.; Henry C. Lott, instructor in psychology State Normal School, Ypsilanti, Mich.; Fong Coo Sec, instructor in English in the Liang Kwang College of Foreign Languages, Canton, China; Lucile H. Stimson, instructor of domestic science in Simmons College; Le Roy Weller, instructor in philosophy Beaver College.

Of the Ph.D.'s of last year Jasper N. Deahl is professor of education in West Virginia University, and Lambert L. Jackson has become manager of the educational department of the publishing firm of D. Appleton and Co.

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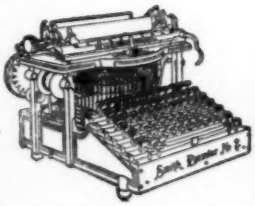

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